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of the

Michigan State Medical Society

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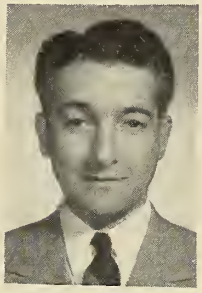
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VOLUME 53 JANUARY, 1954 NUMBER 1

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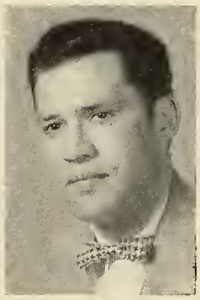
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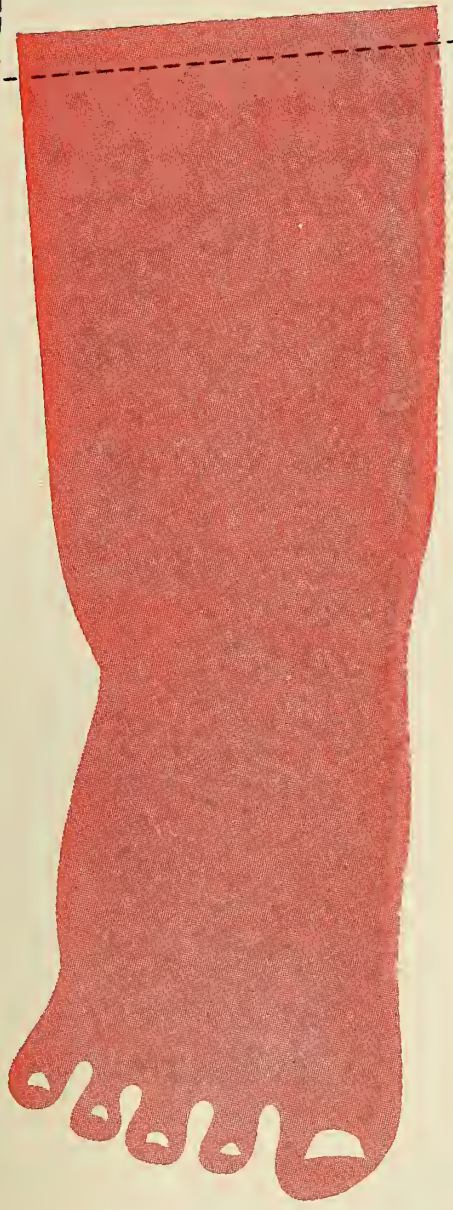
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SEVENTH ANNUAL INTERIM MEETING

The seventh annual Intermim Meeting of the American Medical Association was held in St. Louis, Missouri, December 1, 2, 3, and 4, 1953. A most important function of the meeting of course was the scientific program. Michigan was represented by Carl F. List, M.D., Grand Rapids, "The Relief of Intractable Pain"; Reed M. Nesbit, M.D., Ann Arbor, "Surgically Remedial Congenital Urogenital Defects"; Charles S. Stevenson, M.D., Detroit, "Pelvic Inflammatory Disease"; Paul S. Barker, M.D., Ann Arbor, moderator of a symposium, "Coronary Heart Disease and Angina Pectoris," Sidney W. Hoobler, M.D., Ann Arbor, part of a symposium on "Modern Concepts in Management of Hypertension."

Leo H. Bartemeier, M.D., of Detroit, chairman of the AMA Committee on Mental Health, was pictured in the first issue of the *AMA Daily Bulletin* (published at every national session of the AMA), in conference with Walter B. Martin, M.D., president-elect of the AMA. Speaking at the Public Relations Conference which took place November 30, Dr. Bartemeier said that a failure to understand what motivates patients tends to alienate them from physicians. He urged doctors to try to understand such basic motives as fear and a feeling of insecurity.

The American Medical Education Foundation held a meeting and elected officers Louis H. Bauer, M.D., secretary-general of the World Medical Association and past president of the AMA was elected president. George F. Lull, M.D., secretary-general manager of the American Medical Association, was elected vice president. Edward L. Turner, M.D., secretary of the AMA Council on Medical Education and Hospitals, was chosen secretary-treasurer to succeed Dr. Donald G. Anderson, dean of the University of Rochester School of Medicine, who was elected a member of the board of directors.



"The Michigan Luncheon" for AMA Officers, Trustees and Delegates
St. Louis, Missouri, December 1, 1953

Top Row *(left to right):* J. S. DeTar, M.D., Milan, Michigan; E. C. Texter, M.D., Detroit, Michigan; L. Fernald Foster, M.D., Bay City, Michigan; and G. W. Slagle, M.D., Battle Creek, Michigan.

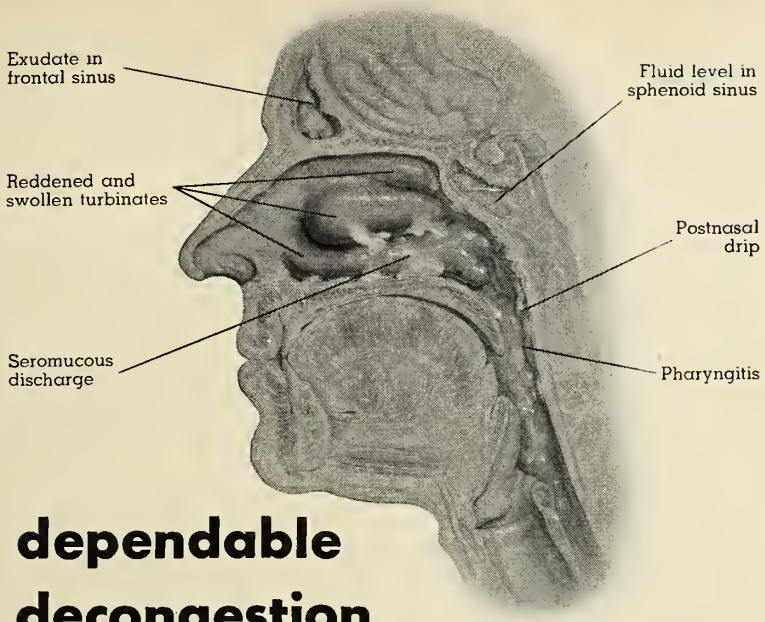
Middle Row *(left to right):* W. D. Barrett, M.D., Detroit, Michigan; Mr. L. G. Goodrich, Detroit, Michigan; W. A. Hyland, M.D., Grand Rapids, Michigan; W. W. Babcock, M.D., Detroit, Michigan; W. H. Huron, M.D., Iron Mountain; R. L. Novy, M.D., Detroit, Michigan; G. C. Penberthy, M.D., Detroit, Michigan; C. H. Gellenthien, M.D., Valmora, New Mexico; and Wilfrid Haughey, M.D., Battle Creek, Michigan.

Seated *(left to right):* William Bromme, M.D., Detroit, Michigan; E. V. Askey, M.D., Los Angeles, California; W. B. Martin, Norfolk, Virginia; E. J. McCormick, M.D., Toledo, Ohio; J. R. Reuling, M.D., Bayside, Long Island, New York; D. H. Murray, M.D., Napa, California; G. F. Lull, M.D., Chicago, Illinois; and L. W. Hull M.D., Detroit, Michigan.

Nearly $5,100,000 has been raised through the efforts of the AMEF and the National Fund for Medical Education. The latter directs its efforts to business, industry and laymen. Contributions from physicians alone, through the AMEF, have totaled nearly $2,700,000.

An eighty-year-old family doctor whose office is less than twenty miles from the birthplace of Abraham Lincoln was named "General Practitioner of

(Continued on Page 10)



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SEVENTH ANNUAL INTERIM MEETING

(Continued from Page 8)

the Year" at the opening session of the House of Delegates in the Gold Room of the Jefferson Hotel.

Joseph I. Greenwell, M.D., of New Haven, Kentucky, who has practiced for fifty-three years in the rugged "Lincoln country" of the Blue Grass State, was chosen to receive the American Medical Association's annual gold medal and citation for his service to his community.

The meeting of the House of Delegates was undoubtedly the most important event because it is the legislative part of the Association, and must pass upon the business of the Association for the past six months, and set the program for the next half year. Michigan has six regular delegates and one section delegate. There were also three alternate delegates in attendance. For several years the Michigan official delegation, which also includes some other officers who may be attending the meeting, the President, Chairman of the Council, Secretary, editor, and others all met for breakfast each day at eight o'clock to talk over the plans for the day, hear reports of the various sessions, committees, or Conference meetings. Several guests of importance were invited for the benefit of their counsel.

William A. Hyland, M.D., of Grand Rapids, served as chairman of the Reference Committee on Military Affairs. Several very important resolutions were referred to this committee and Dr. Hyland made a statemanslike report informing the house as to their proper disposition.

John S. DeTar, M.D., was a member of the Reference Committee on Executive Session.

The House of Delegates of the American Medical Association took important policy actions on social security, voluntary health insurance, medical ethics and unethical practices, medical education, hospital accreditation, military affairs and a wide variety of subjects affecting both physicians and the public. Edward J. McCormick, M.D., of Toledo, Ohio, president of the American Medical Association, addressed the opening session.

The Tuesday program included addresses by James R. Reuling, M.D., of Bayside, New York, Speaker of the House of Delegates, and Chester Keefer, M.D., of Boston, special assistant to Mrs. Oveta Culp Hobby, United States Secretary of Health, Education and Welfare. Annual reports were presented by George F. Lull, M.D., secretary and general manager of the AMA; Dwight H. Murray, M.D., of Napa, California, chairman of the Board of Trustees, and by the standing and special committees of the House of Delegates.

Approving a recommendation by its Reference Committee on Legislation and Public Relations, the House passed a resolution reaffirming its opposition to the compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act and advocating passage of the Jenkins-Keogh bills now pending in Congress. These bills were described as providing for "the development of a voluntary pension program which is equitable, free from compulsion, and satisfies the retirement needs of physicians."

The reference committee report adopted by the House said:

> "The purpose of these bills is to eliminate the discrimination, and inequities which exist under present tax laws by extending the tax deferment privilege to the country's ten million self-employed and also to millions of employes who are not covered by pension plans. The purpose of the resolution is to reaffirm our support of the voluntary pension program provided in the Jenkins-Keogh bills and to reaffirm our strong opposition to the extention of compulsory coverage of physicians and other self-employed persons under Title II of the Social Security Act."

The same committee report urged continued action to obtain passage of the Bricker Amendment (S.J. Res. 1) and approved the principle of legislation which would reduce or remove the limitation on the deduction of medical and dental expenses for income tax purposes. It also opposed any further extension of the "Doctor Draft" Law beyond the present expiration date of June 30, 1955.

The report said:

> "Your Committee feels strongly that there should be no further extension of the 'Doctor Draft' Law. We feel that the legislation is discriminatory and urge the Committee on Legislation and the Board of Trustees to actively oppose any further extension."

The House acted to accelerate the development of voluntary health insurance by passing a resolution requesting the Council on Medical Service to proceed immediately with a special study of the problems of catastrophic coverage and coverage for retired persons. The Council was asked to present its findings and recommendations to the House not later than the 1954 Clinical Meeting. The resolution pointed out:

> "There are two large groups of citizens for whom improved coverage could be offered under present prepaid medical care plans, namely: (a) those individuals who suffer catastrophic or long-continued and highly expensive illness and whose financial resources are not adequate to meet the cost thereof and (b) those citizens who have retired and are living on small incomes and who are not eligible under presently existing public or private plans."

The resolution emphasized the medical profession's "responsibility to make every effort to promote such prepaid medical coverage for all citizens whose circumstances make them eligible."

Another resolution on voluntary health insurance, adjudged to be emergency business by the Reference Committee on Insurance and Medical Service and then passed by the House, stated that "the American Medical Association condemns all

(Continued on Page 12)

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2 WHEN ITS THERAPEUTIC EFFECTIVENESS IS ESTABLISHED

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3 WHEN PALATABILITY ASSURES PATIENT COOPERATION

Bicillin "oral suspension is palatable, was accepted without difficulty by all patients in both groups [children and adults] and was well tolerated."[2]

"No children of any age have been disturbed, and the palatability of the product has made its administration easy."[1]

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Bicillin is highly insoluble in water. Its aqueous suspension, ready for immediate use, is stable for 2 years at ordinary room temperature—77°F. (25°C.). Refrigeration is unnecessary.

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TABLETS BICILLIN:	200,000 units; bottles of 36.
TABLETS BICILLIN:	100,000 units; bottles of 100.

REFERENCES

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2. Coriell, L.L., and others: Antibiotics & Chemotherapy 3:357 (April) 1953.
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SEVENTH ANNUAL INTERIM MEETING

(Continued from Page 10)

insurance contracts which classify any medical service as a hospital service." The resolution reaffirmed previous actions of the House defining pathology, radiology, anesthesiology and psychiatry as medical services.

A second emergency resolution, which would have endorsed the principle of federally subsidized scholarships for prospective military personnel in order to encourage the building up of a career-basis medical corps for the armed forces, was referred by the House to the Board of Trustees for study and action.

A resolution introduced by the Iowa State Medical Society, calling for approval of a joint-billing procedure involving services rendered by two or more physicians, was referred to the Judicial Council, at the suggestion of the Reference Committee on Miscellaneous Business, with the recommendation "that the Judicial Council investigate the factors involved in the matter as presented and determine if there are new factors or new facets that would cause it to change the opinion" determined in 1952.

The House approved a revision of one section of the Principles of Medical Ethics of the AMA which clarifies the relationship of physicians to all forms of public information media. The revision had been worked out by the Council on Constitution and Bylaws.

Studies are being made looking toward rewriting the Principles of Ethics, to make them clearer and more understandable, also in an attempt to liberalize the function of the Judicial Council. If any member has some suggestions of how to reword the little booklet, his suggestions are invited to be sent to the Judicial Council, care headquarters office, Chicago, Illinois.

In an effort to solve the publicity problems resulting from unethical practices by a small minority of doctors, the House referred to the Board of Trustees a resolution calling for appointment of a special committee with broad professional representation to study all aspects of the problems. The Board was asked to study and implement the intent of the resolution and to report its findings to the House at the June, 1954, meeting in San Francisco.

This resolution was prepared in Michigan, but was introduced by a delegate from Oklahoma. It provided for a committee to study the causes and extent of faults or practices which have been the cause of much criticism of the profession in the public press and the national magazines recently —the question of fee splitting and its kindred practices. Now the Board of Trustees has been directed to make a study, and report at the next meeting in San Francisco in 1954. No longer will writers be able to say the profession is doing nothing about this abuse.

To clarify misunderstandings among physicians regarding the rules and regulations of the joint Commission on Accreditation of Hospitals, especially as they concern the role of the Department of General Practice in a hospital, the House adopted the following resolution:

"That this House of Delegates of the American Medical Association request the Joint Commission on Accreditation of Hospitals to publish an article, or series of articles, in the *Journal of the American Medical Association* and other official publications circulating among the medical and hospital professions, to acquaint the medical-hospital profession with the regulations, bylaws and their interpretations, and

"That the Commission clarify the methods by which an aggrieved hospital or its staff may appeal a decision with which they are not in agreement."

In the field of medical education, the House was "pleased to note" that a fourth grant of $500,000 had been made by the American Medical Association to the American Medical Education Foundation for financial aid to the nation's medical schools. The Foundation reported that its 1953 income now totals $1,174,000 and that the number of contributors now is more than double the total in 1952.

At the opening session of the House, Edward J. McCormick, M.D., in his presidential address, made a strong appeal to the nation's physicians for "action that will further the full confidence of the public in our profession."

"Good public opinion cannot be bought," he declared. "It must be earned through exemplary conduct and genuine service in the public interest. Whatever money the AMA and its constituent societies spend for public education and public relations is wasted unless individual physicians take wholehearted interest in assuring the success of these ventures."

Dr. Reuling, emphasizing that much serious work remains to be done, warned that "times are just as troubled as when we had blanket bills before Congress which would have socialized the practice of medicine."

Dr. Keefer told the House that "the voluntary way has been the most successful in the past and there is no reason to believe it will not continue to be in the future." He urged maximum effort, co-operation and leadership on the community level.

Just prior to the clinical meeting, the Joseph Goldberger award for outstanding contributions in the field of clinical nutrition was presented to James Somerville McLester, M.D., of Birmingham, Alabama, a practicing physician for more than fifty years. The award was presented by the AMA through its Council on Foods and Nutrition.

Final registration at the St. Louis Clinical Session totaled approximately 7,500 including about 2,700 physicians.

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Washington Letter

The second session of the 83rd Congress is getting down to its task under conditions that could mean passage of considerable legislation of importance to medicine. Holding over from last session, or certain to be introduced this year, are bills touching on virtually every phase of medicine where the federal government could become involved. New laws are being proposed on veterans' care, social security, national health plans, care of military dependents, medical scholarships for military personnel, and many other subjects.

What will be done with this mass of legislation depends on an administration whose control over Congress is tenuous and a Congress looking forward to the fall, when all members of the House and one-third of the Senate must be elected or reelected. As is the case every two years, most lawmakers will be listening closely to what's being said back home.

Awaiting congressional action is the administration's plan for extending the social security system to bring more than 10,000,000 additional persons, including physicians, under Old Age and Survivors Insurance (OASI). This legislation is known to have less support in the House Ways and Means Committee, where it is being handled, than it has in the Executive Branch.

American Medical Association, supported by dentists, lawyers, farmers, and many other groups of self-employed, has consistently opposed inclusion under OASI. The question now is whether this opposition will be articulate enough to convince Congress.

In place of social security for physicians, the AMA for several years has actively promoted legislation identified first as Reed-Keogh, then as Jenkins-Keogh, named for the sponsoring congressmen. This would allow physicians and other self-employed to defer income tax payments on a portion of their income, placed in restricted pension funds, obtainable in the form of benefits only in case of disability or at the specified retirement age. In this effort the physicians again are joined by a large group of associations representing the self-employed.

Other possible amendments to the social security law involve total and permanent disability payments and waiver of OASI premiums for the disabled, so their final pensions won't be reduced because of periods when they had little or no income. In each of these, medical determinations would be required. In the past, these bills have threatened an expansion of the federal medical program, have laid out an unreasonable role for the physician, or have called for compulsory rehabilitation. While not opposed to the objectives, AMA has urged that both the patient and the physician be protected. In place of waiver of premium, the AMA proposes that pension rates be based on the 10 best earning years, thus obviating the need for medical determinations.

As in other sessions, Congress this year probably will be asked to pass legislation providing free hospitalization under OASI for all persons past 65 covered by OASI, and for other beneficiaries of the program. In other years Congress has not taken this idea seriously.

The veterans program is certain to provoke action. Last November, Veterans Administration amended its forms to require more financial information from veterans applying for hospitalization of non-service connected disabilities, who must state that they cannot afford private care. Congress may want to further clarify the government's obligation to veterans. It is expected also that special effort will be made to expand medical benefits for veterans by such methods as increasing the periods in which certain diseases may be presumed to be of service origin.

AMA's position on the care of non-service connected cases is well known. It consists of three points. First, the best possible care by VA for actual service-connected cases. Second—until local and state facilities are adequate—VA care for long-term tuberculosis and neurological cases when the veteran himself can't pay. Third, all other non-service connected cases to be the responsibility of the veteran himself, his family, or his community.

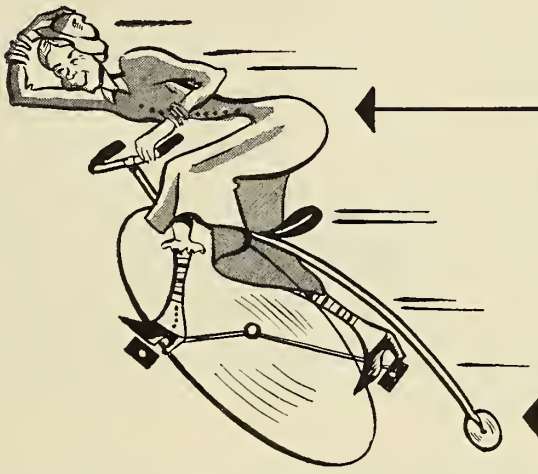
Ths Defense Department has served notice that this session it will press hard for implementation of the Moulton Commission's recommendations for broadening the medical care program for military dependents. The Commission favored caring for as many dependents as possible at military installations, with the others receiving private care and the federal government paying all but a token of the cost. At its December meeting, the AMA's House of Delegates proposed that in this country the military provide medical care for dependents only where private facilities are not adequate.

Also up for decision this year is a Defense Department's proposal that the federal government furnish medical, dental and nursing scholarships, with the recipients obligated for government service at the rate of one year for every year of the scholarship.

There is a strong possibility of pressure to enact a program under which the federal government would in one way or another subsidize private health insurance plans. The idea is known to interest Rep. Charles Wolverton (R., N. J.), chairman of the House Interstate and Foreign Commerce Committee, which last fall conducted a series

(Continued on Page 22)

Times change



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Cancer Comment

THE SEARCH FOR CANCER IS THE FAMILY PHYSICIAN'S JOB

Much has been written in the past few years about the examination of apparently healthy individuals to discover cancer in early and curable stages. The ability of the family physician to make the required examination or to recognize cancer once its presence was suspected also has been discussed pro and con.

According to the thinking of certain groups, vociferously expressed on many occasions, the family physician, considered eminently competent in his usual role of health advisor for the average "run-of-the-mill" group of diseases, is totally incompetent where the recognition of early cancer is concerned. Therefore, it is necessary to provide special facilities and medical skills for the cancer detection examination.

Strangely enough, in many such instances, the physician who is deemed incompetent in his own office becomes a highly competent specialist as soon as he enters the portals of the specialized detection center and proceeds with the examination. In the majority of cases he is at a disadvantage in his new environment, working with new assistants and in strange surroundings. He is handicapped by working with strange patients whose previous history is either entirely unknown or but sketchily known. He may never have seen the patient before nor will he ever see him again after his examination is completed.

The examining physician is further handicapped by the rules governing the examination, which provide that if or when cancer is found or suspected the examining physician must refer the examinee to his own family physician to complete the diagnosis and refute or confirm the first examining physician's findings. In such cases, the first physician's time, as well as that of the one examined has been wasted; for the physician to whom the partially examined patient was referred would in all probability repeat the examination to satisfy himself of the patient's health background and other factors bearing on the case.

Too often the one examined feels an unwarranted sense of security for an indefinite period and neglects the recommended re-examination which is of as great importance as was the original one.

The special cancer detection center is supported by public contributions. The average center has such a limited capacity that not more than one per cent of the contributing population can be served during any one year. It is a question involving high moral principles as to whether the provision of services to not more than one per cent of the contributing public can be justified as a permanent policy. The cost of each cancer found often reaches fantastic figures in these special detection centers.

The limited capacity referred to above often makes for long delays for the examination appointment. This delay has been known to exceed six to nine months. Under such conditions, an early cancerous growth present at the time the appointment for examination was requested could have become a widely spread and incurable cancer during the waiting period.

What is the answer to this problem? It has been solved in a very practical and highly satisfactory manner by the members of the Hillsdale County Medical Society. Six years ago these physicians announced their willingness to examine any of their patients in their offices during regular office hours if the patient made a previous appointment for the examination. In this program all the disadvantages of the specialized cancer detection center were overcome and each physician examined his own patients at a mutually convenient time. The results of this program have been highly satisfactory to both patients and physicians and have provided the best solution yet offered for the cancer detection examination of the general public.

The number of cancers discovered and brought under treatment has been three times as great as the best average figures obtained from the specialized detection centers. About two-thirds of cancers found have been in early stages, hopeful for cure.

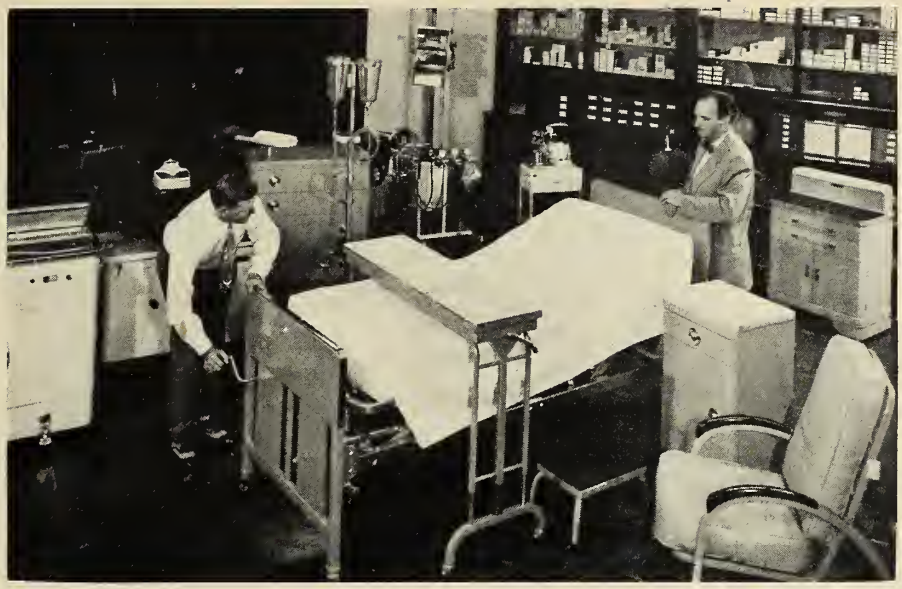
The Hillsdale Plan for Tumor Detection has been widely copied throughout this country and abroad. It effectively answers the problem of how to find the largest number of cancers in an early stage when hope for a cure is greatest. Above all, it has shown that the cancer detection examination belongs in the physician's office amid familiar surroundings and with intelligent technical assistance whenever necessary. Economically, the cost to the community is almost nil, as each patient pays for his examination in keeping with the fee schedule of the physician.

All Michigan physicians can provide this same service to their patients. By so doing they not only improve their relations with patients who are being urged to have these examinations, they provide the only known practical way to find cancer in an early and curable stage.

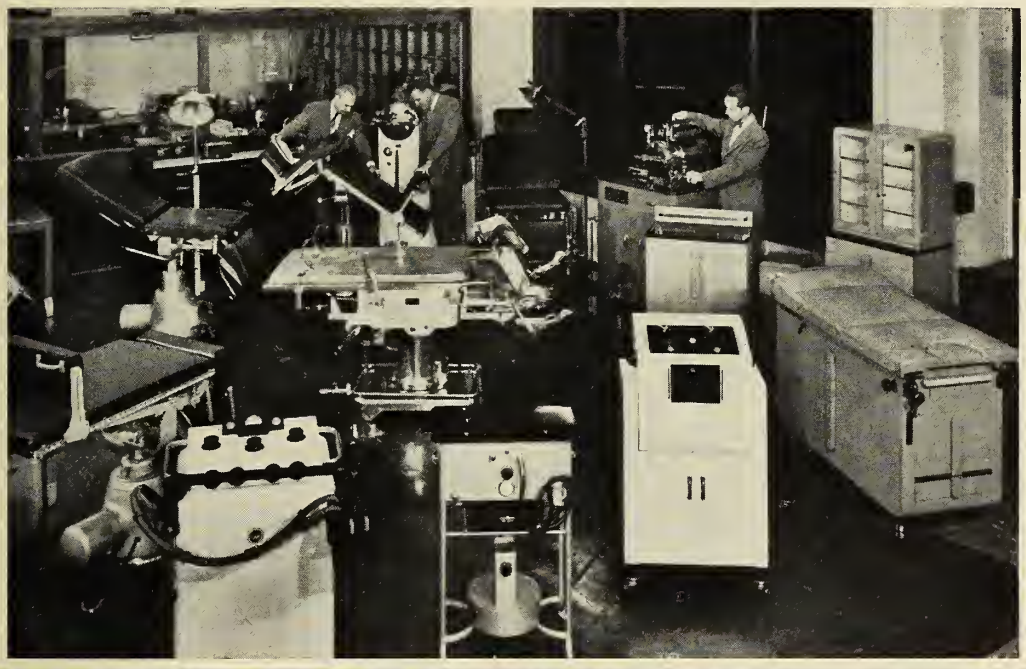
Cancer of the esophagus is five times more common in men than in women.

The poor prognosis of cancer of the esophagus is due more often to diagnostic inefficiency than to ineffective surgery.

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- Renal function, unless previously grossly reduced, is not compromised.
- Cerebral blood flow is not decreased.
- Cardiac work is not increased, tachycardia is not engendered.
- No dangerous toxic effects from oral administration, no deaths attributable to Veriloid have ever been reported. Side actions of sialorrhea, substernal burning, bradycardia, nausea, and vomiting (due to overdosage) are readily overcome and thereafter avoi by dosage adjustment.
- In broad use over five years, literally in h dreds of thousands of patients, no ot sequelae have been reported, whether V loid is given orally or parenterally.
- Tolerance or idiosyncrasy rarely develc allergic reactions have not been encounte Hence tablets Veriloid can be given for long course of treatment required in se hypertension.
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e slow-dissolving, scored tablets are supplied in 2 and 3 mg. potencies. In moderate to severe hypertension they produce gratifying response in many ients. According to published reports[1] this response can be maintained for long periods in fully % of patients; combination with other hypotensive agents has been credited with greatly increasing this percentage.[2] Initial daily dosage 9 mg., given in divided doses, not less than 4 hours apart, preferably after meals. Dosage is to be increased gradually, by small increments, till maximum tolerated dose is reached. Maintenance dose 9 to 24 mg. daily.

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the immediate reduction of critically elevated od pressure in hypertensive emergencies such as ertensive states accompanying cerebral vascu- disease, hypertensive crisis (encephalopathy), toxemias of pregnancy. It lowers the blood pres- e promptly, to any degree the physician desires, and with notable safety, since excessive hypotensive and bradycardic effects are readily overcome by simple means. Supplied in a combination package containing one 5 cc. ampul and a 20 cc. vial of diluent, and in boxes of six 5 cc. ampuls. The solution contains 0.4 mg. of Veriloid per cc.

UTION INTRAMUSCULAR

maintenance of blood pressure in such critical tances, and for primary use in less critical situ- ns which do not show the same immediate ency. Provides 1.0 mg. of Veriloid per cc. in tonic aqueous solution incorporating one per cent caine hydrochloride. A single dose lowers the od pressure significantly, reaching its maximum hypotensive effect in 60 to 90 minutes. By repeated injections (every 3 to 6 hours) blood pressure may be kept depressed for hours or days if necessary. Supplied in boxes of six 2 cc. ampuls. Complete instructions as to dosage and administration accompany every ampul of the parenteral preparations of Veriloid and should be noted carefully.

1. Kauntze, R., and Trounce, J.: Treatment of Arterial Hypertension with Veriloid (Veratrum Viride), Lancet *2*:1002 (Dec. 1) 1951.

2. Wilkins, R. W.: Combination of Drugs in the Treatment of Essential Hypertension, Mississippi Doctor *30*:359 (Apr.) 1953.



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Heart Beats

FIFTH ANNUAL MICHIGAN HEART DAY SCHEDULED

Recent advances in the field of heart and circulatory diseases will be highlighted at the Fifth Annual Michigan Heart Day to be held at the Sheraton-Cadillac Hotel in Detroit on March 12, 1954. Heart Day, which is held each year as an integral part of the Michigan Clinical Institute, is sponsored by the Michigan Heart Association and will feature outstanding reports on the most recent developments in heart research in Michigan and in the nation.

Departing slightly from its usual schedule of events, the 1954 Heart Day will begin with the Annual Meeting of Members of the Association at 9:00 A.M. This meeting will be brief, but important, and will end promptly at 9:20 A.M. The scientific program will begin at 9:20 A.M. and will end on schedule at 12 noon. The schedule of speakers and the topics to be discussed is as follows:

Stanley Gibson, M.D., Chicago—"Clinical Diagnosis of Congenital Heart Disease"

Cameron Haight, M.D., Ann Arbor—"Cardiac Surgery"

Albert Boyle, M.D., Detroit—"Physico-chemical approach to the Establishment of a Test for Atherosclerosis"

Mark Nickerson, M.D., Ann Arbor—"Shock"

George E. Wakerlin, M.D., Chicago—"Hypertension"

A dinner meeting of the Board of Trustees has been scheduled for 6:30 P.M. in the Founders Room of the Sheraton-Cadillac Hotel.

NEW HEART ASSOCIATION BOOKLET TELLS HOW TO KEEP THE SICK-ABED CHILD HAPPILY OCCUPIED

Michigan M.D.'s will be interested in a recently published Heart Association booklet entitled "Have Fun—Get Well." The booklet is directed primarily to young people and to parents whose children are ill with rheumatic fever or rheumatic heart disease. The publication contains forty pages of specific suggestions which can be helpful to all parents and convalescents, including those faced with no more pressing problem than a bad cold.

For youngsters convalescing from serious illness, keeping cheerfully occupied is an important phase of therapy. J. G. Fred Hiss, M.D., chairman of the American Heart Association's Council on Rheumatic Fever and Congenital Heart Disease, notes in a foreword, "Time stretches out like a great desert for the patient who must spend a long convalescence in bed." The purpose of the pamphlet, he adds, is "to help parent and patient make this time of physical repair a period that is also mentally and spiritually constructive."

"Have Fun—Get Well" is actually two booklets in one. The first section, addressed to teen-agers, was written by Maryelle Dodds, occupational therapist, who has worked extensively with young rheumatic fever patients at Los Angeles County General Hospital. The second section, for parents of four-to-ten-year-olds, was prepared by the American Heart Association. The Association is responsible also for the comprehensive bibliography, listing sources of additional information and working materials, which is one of the pamphlet's most useful features. It should prove particularly valuable to those who do not have ready access to big-city resources such as craft shops.

After suggesting several ways to make it easy to work in bed, the guide for teen-agers describes many hobbies and other occupations which they can undertake while confined to bed, provided the doctor approves. Carving, finger weaving, fly tying, paper sculpture, learning to touch type, are just a few examples. Emphasis is placed also on a number of "jobs" for the convalescent, such as putting the recipe file in order or pasting up the picture album. Chores like these give the youngster the satisfaction of sharing family responsibilities, says the booklet, adding: "Just try working and see if you don't feel better!"

Simpler projects—including some like catching sunbeams in a mirror to make "just looking" interesting for the child whose activity must be kept at a minimum—are detailed in the section for younger children. The pamphlet stresses that parents should not expect too much either of themselves or of a sick child. "Most mothers cannot—and should not—devote full time to entertaining the patient," it states. Although the suggested activities will take some adult attention at the beginning, most are designed to help the child continue on his own. They require only materials readily available at home or the dime store.

Sprightly drawings on almost every page do much to make the pamphlet attractive to the youngster who will use it. Copies may be obtained from the Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan.



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1. Slepyan, A. H. (1952), Arch. Dermat. & Syph., 65:228, February. 2. Slinger, W. N. and Hubbard, D. M. (1951), *ibid.*, 64:41, July. 3. Sauer, G. C. (1952), J. Missouri M. A., 49:911, November.

1-34B-54

PR REPORT

RECOGNIZING PR OPPORTUNITY with opening of WPAG-TV in Ann Arbor, Washtenaw County Medical Society, in co-operation with MSMS, went on air in November with one of the first regularly scheduled local programs over the new ultra-high frequency station. MSMS provides motion pictures used on weekly half-hour show titled "Drama of Life." Prologue to MSMS film "To Save Your Life" adopted as opening sequence for each show. Starting as a movie presentation, program may be adapted to panel format at later date, featuring Washtenaw County doctors of medicine.

OVER 100,000 PAMPHLETS were mailed to MSMS members within one month, following inauguration of a new PR effort for wider circulation of factual information on health-medical care using physicians' offices as distribution centers. After the initial November mailing (some 85,000 pamphlets), individual M.D.'s requested additional 25,000 in short order. Requests still being received by MSMS Public Relations Department well into December. Four pamphlets included in first mailing, all produced by AMA: "Your Money's Worth in Health," "What About This Doctor Shortage?", "A Doctor For You," and "The AMAzing Story." Why not make these pamphlets available to your patients? Order from MSMS.

IN MSMS PR MILL AT LANSING headquarters are two new publications. One is handbook designed to better acquaint members with functions, services of State Society. While originally conceived for newcomer indoctrination, this booklet should prove valuable to every MSMS member.

The second is PR Manual planned as guide for county medical societies in developing and operating local PR programs. Aims and objectives of PR activity at community level will be discussed. Techniques which county societies may employ in successful PR program also stressed.

HERE'S FINAL APPEAL to secretaries and PR chairmen of county medical societies: Be sure your organization is well represented at Annual PR Conference Sunday, January 31, at Sheraton-Cadillac, Detroit. Some new twists for PR in 1954 are on agenda. Activities this year will emphasize importance of "hometown" PR and assistance to county medical societies.

PR NOTES AT RANDOM: MSMS officers and delegates present for the AMA mid-year clinical session in St. Louis brought home some valuable new PR concepts from Sixth Annual Medical Public Relations Conference, held in conjunction. . . . AMA reports demand for radio transcriptions on health subjects set record in 1953. Several popular transcribed series are available via MSMS to local medical societies for broadcast. . . . "Losing to Win," Metropolitan Life Insurance Co. film on problems and control of overweight for lay audiences, now released for educational showing. Under "Cheers for Chubby" title, film was well received in recent showings before commercial theater audiences throughout Michigan. . . . Another new film, concerned with solving school health problems through community effort, "School Health in Action," has been placed in AMA library for showing before interested groups. . . . Requests for films, transcriptions, and other materials may be channelled through MSMS PR Department.

WASHINGTON LETTER

(Continued from Page 14)

of hearings on health matters. Senators Ives (R., N. Y.) and Flanders (R., Vt.) are offering a bill along the same lines in the Senate.

The controversial Bricker resolution holds over from the last session, and may receive early consideration in the Senate. Senator Bricker believes that Congress should have some check on the President's treaty-making powers. The American Medical Association repeatedly has indorsed the Bricker resolution as a safeguard against the introduction into this country by treaty of government-controlled medical plans without Congress itself having a chance to pass on them.

Awaited with interest in Washington are the findings of two Commissions appointed last year to look into the relationships between the federal government on the one hand and state and local governments on the other, and to investigate operations of the executive branch. The former is headed by Clarence Manion and the latter by former President Hoover. The Hoover Commission has until next year to make its report. The Manion Commission was instructed to have a report ready by March, but it may ask for more time.

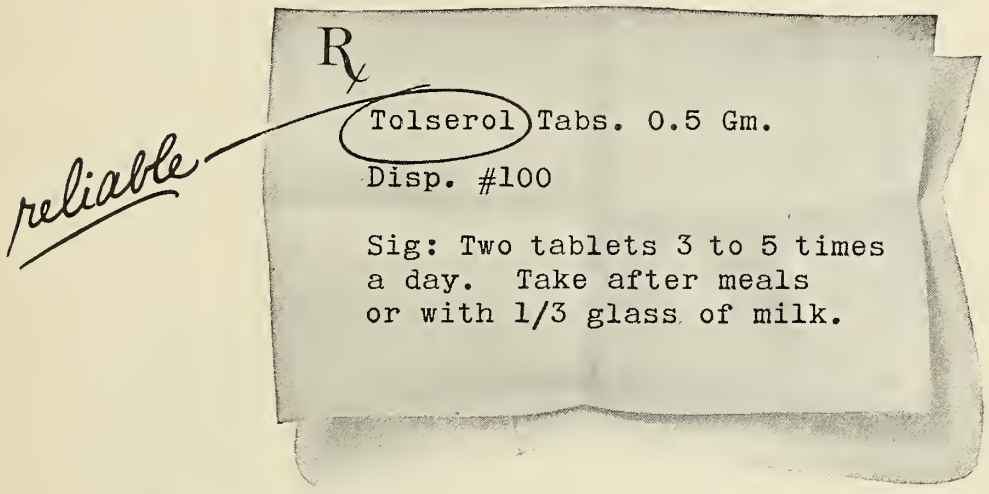
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December 9, 1953

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SQUIBB

Beaumont Memorial Contributions

(Continued)

Additional contributors to the Beaumont Memorial Fund, to November 6, 1953, are listed below: This list does not include the names of any contributors whose names were previously published in JMSMS.

The Beaumont Memorial on Mackinac Island has been completed except for landscaping and furnishing the interior.

Up to November 1, the sum of $39,648.90 had been expended on the Beaumont Memorial; contributions from members of the Michigan State Medical Society et al have totalled $30,959.17. To complete the job, it is anticipated that an additional outlay of $6,000.00 will be needed.

Contributions from any MSMS members who have not as yet sent their checks for the Beaumont Memorial may be forwarded to Beaumont Memorial Committee, Otto O. Beck. M.D., Chairman, Box 539, Lansing 3, Michigan.

The continuing list of contributors to the Beaumont Memorial includes:

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Dedication Set for July 17, 1954

The Beaumont Memorial on Mackinac Island will be dedicated with formal ceremonies on Saturday, July 17, 1954. This important event will be a high point in the history of Michigan Medicine. The Beaumont Memorial will be "a long-time monument to the generosity of Michigan's medical men," a statement by Dr. Beck which has been oft repeated.

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Fellowship Awards Granted MSMS Members in Postgraduate Medical Education

The following members of the Michigan State Medical Society were granted Fellowship and Associate Fellowship certificates in Postgraduate Medical Education during the year 1953:

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Associate Fellowships: Addison B. Aldrich, M.D., Hancock; Leonard C. Aldrich, M.D., Houghton; William H. Alexander, M.D., Iron Mountain; Robyn J. Arrington, M.D., Detroit; William L. Bird, M.D., Greenville; Thomas B. Bolitho, M.D., Marquette; Duncan A. Cameron, M.D., Detroit; Arthur J. Carlton, M.D., Escanaba; Harry L. Clark, M.D., Muskegon; Daniel E. Cohn, M.D., Detroit; Goldie B. Corneliuson, M.D., Lansing; Schuyler O. Cotton, M.D., Detroit; Francis C. Cretsinger, M.D., Kalamazoo; Carl W. Dahlgren, M.D., Keego Harbor; Robert J. Deering, M.D., River Rouge; Richard C. Deming, M.D., Jackson; Ralph C. Dixon, M.D., Pigeon; Charles P. Drury, M.D., Marquette; Nicholas J. Ellis, M.D., Muskegon; Robert W. Emerick, M.D., Muskegon; Martin Z. Feldstein, M.D., Detroit; Donald D. Finlayson, M.D., Sault Ste. Marie; John R. Gehman, M.D., Au Gres; Bernard J. Goldman, M.D., Mt. Clemens; Virgil R. Graber, M.D., St. Johns; William Haeck, Jr., M.D., Grand Rapids; Marie A. Hagele, M.D., Sault Ste. Marie; David B. Hagerman, M.D., Grand Rapids; William H. Harrison, M.D., Lansing; Willis A. Hasty, M.D., Shelby; Frank B. Heckert, M.D., Lansing; Joseph Hickey, M.D., Detroit; Raymond E. Hillmer, M.D., Painesdale; William Hing, M.D., Flint; Louis J. Hirschman, M.D., Traverse City; Clarence L. Hoogerland, M.D., Alma; Melvin C. Jones, M.D., Bay City; William R. Kavanaugh, M.D., Kalamazoo; David N. Kilmer, M.D., Reed City; William D. Knapp, M.D., Flint; Edmund J. Knobloch, M.D., Detroit; Ross M. Knox, M.D., Ecorse; Paul T. Lahti, M.D., Royal Oak; Ruth E. Lalime, M.D., Bear Lake; Maurice J. Lieberthal, M.D., Ironwood; Adolf W. Lowe, M.D., Detroit; John N. McNair, M.D., Muskegon; Thomas B. Mackie, M.D., Sault Ste. Marie; Douglas E. Maples, M.D., North Muskegon; Paul E. Medema, M.D., Muskegon; Michael J. Michael, M.D., Detroit; Glenn E. Millard, M.D., Detroit; James A. Morley, M.D., Detroit; William H. Morrison, M.D., Grand Blanc; Max M. Mosen, M.D., Detroit; Gordon D. Ogilvie, M.D., Manistee; Everett L. Phelps, M.D., Hastings; Edwin W. Prentice, M.D., Muskegon; Robert E. Rice, M.D., Greenville; John L. Riker, M.D., Alpena; Robert D. Risk, M.D., Muskegon; Andrew M. Roche, M.D., Calumet; Wilfred J. Rowell, M.D., Alpena; Joseph T. Sadzikowski, M.D., Dearborn; Carlisle F. Schroeder, M.D., Detroit; Maurice J. Smith, M.D., Flint; Martin Luther Smith, M.D., Muskegon; Frederick B. Steiner, M.D., Garden City; Isadore D. Stern, M.D., Houghton; Lawrence L. Stocker, M.D., Detroit; James N. P. Struthers, M.D., Ypsilanti; Frederick C. Swartz, M.D., Lansing; Thomas A. Tenaglia, M.D., Ecorse; Harry F. Vail, M.D., St. James; Vasile O. Vasu, M.D., Detroit; Arch Walls, M.D., Detroit; Heinz R. Weisheit, M.D., Sturgis; Theophile W. Wienczewski, M.D., Alpena.

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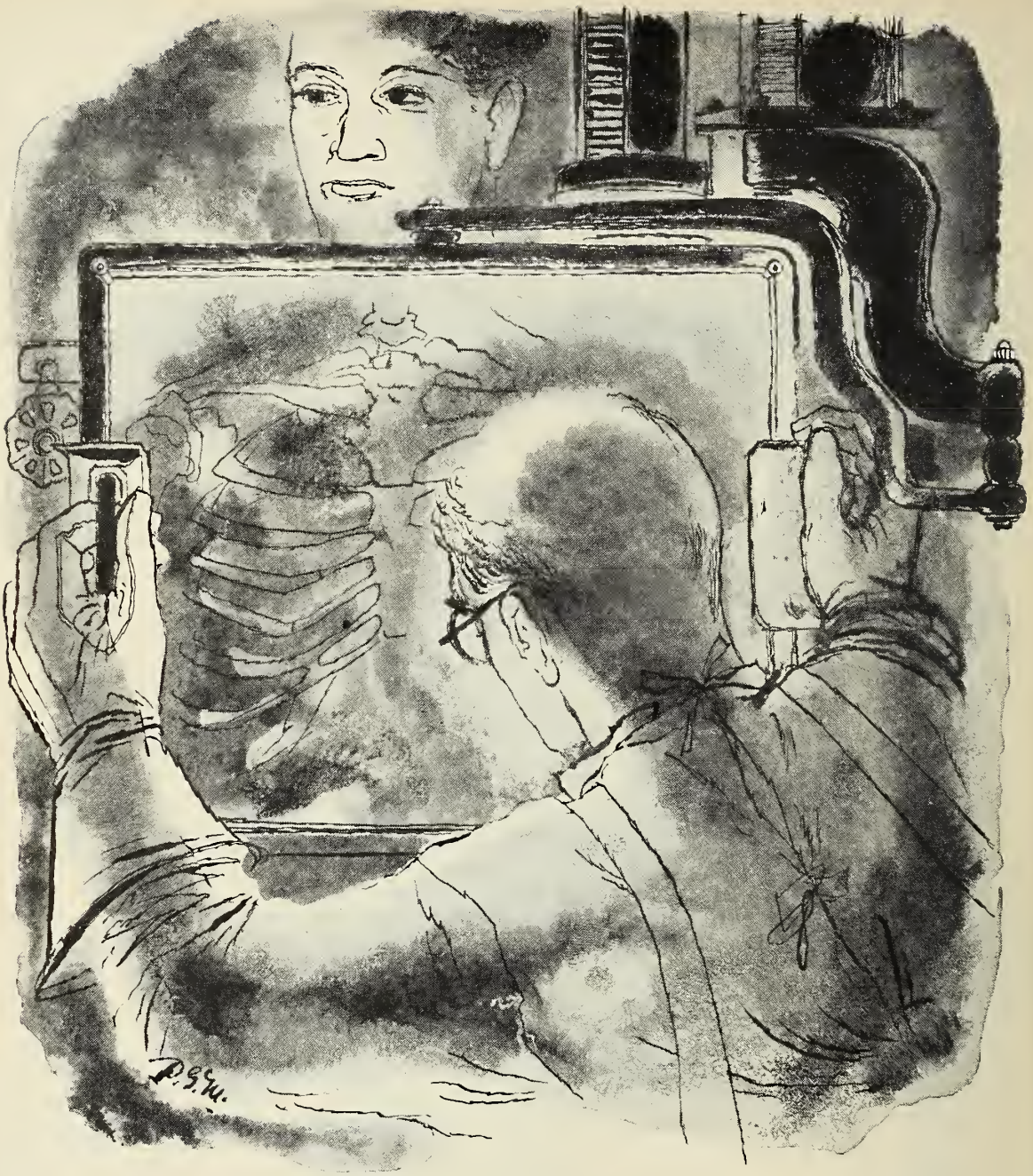
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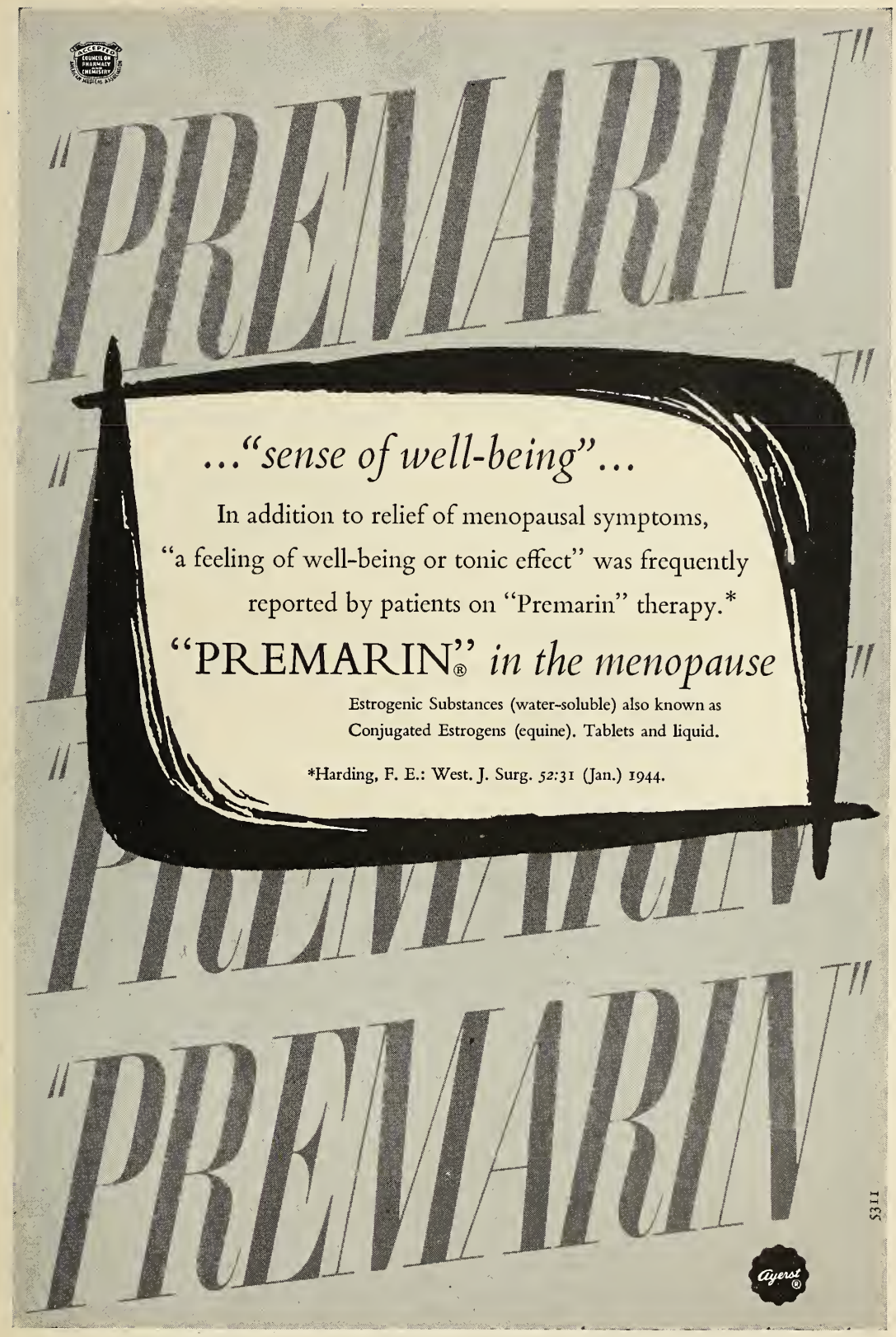
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The JOURNAL

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Treatment of the Ambulatory Asthmatic Patient with Corticotropin Purified in Gelatin

By Leslie N. Gay, M.D. and
George W. Murgatroyd, Jr., M.D.

Baltimore, Maryland

THE RESULTS of treatment of the asthmatic patient have been most discouraging to the general practicing physician in spite of the advantages of such drugs as ephedrine, aqueous adrenalin, adrenalin in oil, aminophyllin, and the oxygen tent. Temporary relief can be obtained by one or more of these remedies, but until the discovery of ACTH, sustained relief was the occasional rather than the usual reward for heroic measures. Another problem which confronts the internist is the limited hospital space available for the treatment of the chronically ill patient. The asthmatic patient, who falls into the category of the "chronically ill," unfortunately has attacks of dyspnoea so severe that he (or she) is completely incapacitated, often for many days. Paradoxically, he now becomes an acutely ill patient, but hospitalization is still difficult to obtain. The discovery of the hormones, Cortisone and Adrenocorticotropin, has opened up new avenues of approach toward a solution of a most distressing group of symptoms.

Earlier investigations have proved without doubt that crystalline ACTH, administered by injection four to six times in twenty-four hours, gives prolonged remissions to a great majority of patients suffering with moderately severe or extremely severe asthma. The disadvantages of the treatment are obvious: the patient must be in a hospital; local reactions occasionally occur at the point of injection; the economic strain on the patient is a serious consideration. A purified repository form of this hormone offers a solution to these disadvantages. McCombs[3] used ACTH combined with purified gelatin, or suspended in sesame oil. He concludes that 40 units per day given in a single dose is as effective as 60 to 80 units in divided doses of the aqueous hormone. Gay and Murgatroyd[1] using ACTH suspended in peanut oil or sesame oil, treated eight patients having contact dermatitis. Results were excellent. Recently, the manufacturers have made available a preparation of highly purified Corticotropin in gelatin. Levin[2] recently reported his experiences with repository adrenocorticotropic hormone in allergic diseases. His results were excellent, and he encountered no undesirable side effects nor observed any evidence of allergic sensitivity. Our survey supplements Levin's recent findings.

The survey comprises the treatment of seventy-eight ambulatory patients who suffered from severe bronchial asthma and emphysema. This clinical investigation was prompted by a combination of problems, preponderant among which were: severity of the symptoms; lack of beds for immediate admission; economic burden borne by the chronic ambulatory patient; hoplessness of outlook for the chronic bed-ridden patient.

Many of the patients had been under observation for a number of years prior to the discovery of ACTH. All therapeutic measures had been tried, including large doses of antibiotics, often with transient success. Thus the results of other methods can be compared with those of ACTH.

Prior to treatment a complete diagnostic survey was made: including x-ray studies of the sinuses and chest, electrocardiograms, and when

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indicated bronchograms to eliminate bronchiectasis. Throughout the period of treatment with Corticotropin, careful supervision of the patient is essential. In these patients blood pressure records, urinalysis, blood studies with special reference to blood sugar, non-protein nitrogen and eosinophil response to ACTH were made repeatedly.

H. P. Acthar Gel is available in 5 cc. vials containing 20, 40, and 80 units per cc. The material is fluid and requires no preliminary preparation. Needles and syringes must be dry sterilized to avoid contamination of the vial with water. Our injections were made in the glutei through a 20-gauge needle under sterile precautions.

Experienced physicians through recognized procedures can control the symptoms of the asthmatic patient in the early stages. But the more prolonged the duration of symptoms, and the older the patient, the more difficult it becomes to give sustained relief. The asthmatic patients in this report are divided into four age groups.

Group I	3 yrs. to 20 yrs.
Group II	20 yrs. to 40 yrs.
Group III	40 yrs. to 60 yrs.
Group IV	60 yrs. to 80 yrs.

Discussion will be directed especially to the older two groups, patients who had derived little or no relief from other therapy.

All patients were treated once in twenty-four hours. Total dosages were recorded for each period of treatment. On the first day, 60 to 100 units, depending on the severity of the symptoms, were administered. On the second and third days, 60 to 80 units were administered. On the fourth and subsequent two or three days, 20 to 60 units were administered, depending entirely on the individual response to this schedule of dosage. Daily treatment was given to the majority of the patients for from five to seven days.

As Levin points out, besides the necessity for frequent administration of the aqueous preparation intramuscularly, there is the tendency to severe local reaction. In this study of seventy-eight patients, no instance of local reaction occurred at the site of approximately 2,000 injections of the repository form of the hormone.

In patients undergoing short periods of treatment, studies of 17-Ketosteroids are unnecessary to good clinical management. However, eosinophil studies were determined in every case: In the majority there was a sharp reduction in the count after the first or second dose; subsequently the counts fluctuate, on occasion higher than the original count. Patients improved clinically irrespective of the count. There is sufficient experimental data to conclude that the ACTH effect on 17-Ketosteroids is the same when this hormone is in repository form as when it is in aqueous solutions. Such studies, therefore, were omitted in this group of patients.

Analysis of Results of Treatment

Groups I and II

It is the exceptional patient of the first four decades whose symptoms cannot be controlled by the usual remedies which were available to physicians prior to the discovery of ACTH and Cortisone. These remedies need not be reviewed. Thorough study reveals a specific allergic factor, the elimination of which gives dramatic relief. When elimination is impossible, as is the case of a patient who has asthma from the inhalation of pollen, desensitization, when indicated, is essential. The patients in Groups I (3-20 years) and II (20-40 years) had failed to obtain satisfactory relief from these usual measures, and for this reason H. P. Acthar Gel was considered as a possible remedial agent.

In the first group there were seven patients, all males. Ages were from three years to twenty years. The child of three years is especially interesting as the hormone ACTH undoubtedely saved this child's life. (Table I.)

Age Group I (3-20 Years)

Case 2.—D.B., a three-year-old child, has had asthma since the age of three months. When first seen he was extremely ill, and was immediately started on ACTH in oil. He was given a total of 300 mgms. with complete relief. Skin tests by Passive Transfer Technique showed a number of reactions to inhalants, peanut butter and ragweed pollen. Frequent ingestion of peanut butter was the principal cause of his asthma. The patient is now under specific treatment with extracts of ragweed and house dust. Since the initial course of treatment with repository ACTH, he has had no further asthmatic discomfort except one spell, lasting a few days in June 1951, cause undetermined.

These seven patients responded to H.P. Acthar Gel without local reaction; there were no side effects excepting as mentioned in Case 2; the clinical

TABLE I. AMBULATORY PATIENTS: ASTHMA-HAY FEVER
AGE GROUP I: 3-20 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
1	A.A.	14	M	7 Yrs.	Moderate (Acute)	Primary: Allergy Secondary: Infection	150	—	None	Excellent	Mild attacks controlled by adrenalin spray.
2	D.B.	3	M	3 Yrs.	Continuous status asthmaticus	Primary: Allergy Secondary: Infection	300 (80–80–80–60)	1441–143 44–0 0–165	General oedema (temp.)	Life saving	Violently allergic to dust, nuts (peanut butter). No recurrence of asthma.
3	C.E.	20	M	18 Yrs.	Continuous asthma	Primary: Allergy	1–160 2–Cortone 12.5 mgms. B.D.	847–264	None	Excellent	Relief continues on cortone and erythrocin.
4	B.T.	15	M	11 Yrs.	Very severe	Primary: Infection Secondary: Allergy	ACTH crystalline plus H.P. acthar gel 300 units.		None	Excellent	Hospitalized for convenience.
5	L.B.	9	M	5 Yrs.	Severe	Primary: Infection Secondary: Allergy	1–120 2–Hydrocortone 10 mgm. b.d.	168–88	None	Excellent	Asthma caused by physical changes, fumes, chocolate, in addition to infection and allergy.
6	A.H.	19	M	4 Yrs.	Moderate	Allergy	1–120 2– 80 3–Hydrocortone 20 mgm. b.d.	1738–0 902–110	5 Lb. weight gain	Excellent	Asthma occurs during ragweed season.
7	R.R.	11	M	6 Yrs.	Severe	Primary: Allergy Secondary: Infection	1–180	506–66	None	Excellent	Child had emphysema and plugged bronchi allergy to ragweeds, grasses and inhalants.

improvement of each patient was rapid and prolonged.

In the second group there were sixteen patients, ages twenty to forty years, average age thirty-three years. The sex was equally divided. Seven patients whose symptoms occurred as acute paroxysms, failed to obtain relief until after the administration of H.P. Acthar Gel. The other nine patients had been completely incapacitated for days prior to the administration of the hormone. Allergy was the primary cause of the attacks in thirteen patients; infection precipitated the respiratory symptoms in three patients; however, in four patients of the allergic group, infection, though secondary, was an important factor. Although the majority of these patients had acute paroxysms of asthma, complete relief followed the treatment in all but five patients.

The case histories of several of the group are of interest:

Age Group II (20-40 Years)

Case 1.—F.B., a thirty-year-old man, has had nasal allergy since 1946 and asthma since 1947. In the past, upper respiratory infections had precipitated asthma, but after the administration of penicillin, the problem was brought under control. In January 1952, he was first given H.P. Acthar Gel because of a severe asthmatic attack, presumably brought on by an infection. This was brought under control by the administration of the hormone. During the course of the treatment, he developed pain in his right shoulder joint, in both jaws and in the left wrist; this discomfort subsided after H. P. Acthar Gel had been discontinued. The patient was symptom-free for about nine months; then he was hospitalized because of severe bronchial asthma. He was given H. P. Acthar Gel in progressively lower doses and there was prompt response and complete relief by the time of his discharge.

Since October 1952, he has been given infrequent doses of H. P. Acthar Gel; also Cortisone orally when indicated. Finally he moved to a milder climate than that of Maryland, and has been comparatively free of symptoms. In a summary, neither Corticotropin nor Cortone was as helpful as expected.

Case 3.—R.G., a thirty-eight-year-old woman, developed her first attacks of asthma at the age of fifteen. In March 1953, her symptoms became so distressing that the usual medication failed to give her any relief. She was given 80 units of H. P. Acthar Gel on March 20, and by March 21 the eosinophil count—which had registered 541—dropped to zero. She showed marked improvement. Examination of her chest showed comparatively few asthmatic râles and she was given a second dose of 80 units. Following this course of 160 units the patient completely recovered from her discomfort, and there has been no return of symptoms since March 1953.

Case 5.—W.L., a thirty-three-year-old man, has been under observation since he was five years old. For more than twenty years he had suffered with seasonal hay fever and received specific injections. His asthmatic discomfort began in 1951 during the grass season. Examination revealed a chest full of wheezes, and marked respiratory discomfort even without exertion. In 1951 he was given a course of ACTH in sesame oil, a total of 180 mgms. Following this therapy, there was slight

local reaction in the deltoid and considerable fatigue, but his symptoms immediately subsided. Subsequently, when his asthmatic discomfort develops, his symptoms have been controlled each season by a single dose of H. P. Acthar Gel.

Case 8.—M.N., a thirty-two-year-old man, gives a history of having developed hay fever in August 1948. With his hay fever he has also had pollen asthma. He received specific treatment with the pollens of ragweed and grasses with excellent results for two years. In January 1953 he stopped all treatment, and with the onset of the grass season in May he had very severe asthma which failed to respond to the ordinary medication. May 14 he was administered 80 units of H. P. Acthar Gel. Within twenty-four hours his eosinophil count of 349 cells dropped to 11 cells. His asthma subsided several hours after the first injection, and on May 15 he was given a second dose of 40 units. He returned May 18 completely free of all discomfort. The eosinophil count had increased to 550 cells. He has had no difficulty since returning to his desensitization program.

Case 9.—W.P., a thirty-seven-year-old woman, developed hay fever at age nineteen—eighteen years ago. Two years ago she was first examined after she had developed asthma. Although she was allergic to pollens only, she had been continuously short of breath. Adrenalin, administered repeatedly, gave transient relief. She was given 80 units of H. P. Acthar Gel and in twenty-four hours she was free of discomfort. The eosinophils increased from 242 to 253 cells. A second dose of 80 units was administered the following day, and her improvement continued for three days. Subsequently during a period of twelve months she was given desensitization therapy and three additional courses of H.P. Acthar Gel. Because of her failure to respond satisfactorily, even though Cortone was prescribed to supplement this treatment, she moved to Florida. For reasons which cannot be explained, she responded poorly to the hormone.

Case 10.—J.P., a thirty-five-year-old man, developed hay fever in 1942. Symptoms began in April and continued to mid-July. He was first examined in 1951, and the pollens of trees and grasses were found to be responsible for his discomfort. Because of the persistence of his symptoms, he was given 40 units of H. P. Acthar Gel May 9, 80 units May 10, and 40 units May 11, a total of 160 units. His eosinophils increased from 100 to 132 cells per cu. mm. He experienced an excellent result from this therapy, and has had no recurrence of asthma.

Case 12.—B.W., a thirty-three-year-old man, has been under observation since May 1950. He gave a history of asthma that developed when he was eighteen months of age. He continued to have mild attacks each year throughout his childhood. However, by the time he was seventeen years of age, hay fever and asthma occurred only during the summer months. At twenty-one, he began to have more frequent respiratory discomfort and he developed perennial asthma, for which he could obtain no relief from the usual medications. Change of climate had little effect. Specific injections were administered over a period of years. Two years ago when ACTH was available in sesame oil, he was given his first course of the hormone. He was in such extreme discomfort that I was fearful he might not survive the severity of his attack. During the summer of 1951, from June to October, he received repeated injections of ACTH in oil. His last dose in 1951 was administered September 24. During the winter of 1952 he was asymptomatic. However, in June 1952, with the onset of asthma, 80 units of H. P. Acthar Gel were administered once each week, and continued throughout the entire pollen period which ended October 1. As he was free of symptoms in the winter of 1953 no treatment was administered until May 1. Through the summer of 1953, he was given 60 units of H. P. Acthar Gel once each week with complete freedom of symptoms.

Since his asthma began when he was eighteen months of age, the success of this treatment indicates that serious future discomfort may be prevented in similar cases, if the schedule of the past two years is repeated annually.

There were six relapses in the twenty to forty-year group; three patients had side effects, one of which—generalized tremor and apprehension following the initial dose of 80 units—was so severe that further administration of ACTH was not attempted.

Groups III and IV

It is to age groups III (40-60 years) and IV (60-80 years) that special attention is directed, as these patients are the serious clinical problems encountered every day by the internist. The primary problem is infection; the secondary problem, the aftermath of prolonged dyspnea, is emphysema. Allergy is of little importance in the majority of the cases. For example, allergy played a minor rôle in only six of the fifty-two patients in the two age groups.

The average age of the forty to sixty year group (twenty-nine patients) was fifty-two years and sex was equally divided. In twenty-four patients the attacks were very severe and disabling. In five patients the attacks were moderately severe, but had been unresponsive to all previous treatment including antibiotics. Infection and emphysema were the causes of the dyspnoea. The proper dosage of H. P. Acthar Gel administered to any patient cannot be determined prior to treatment, for the reaction of each individual is markedly different. Relapses were encountered in a number of patients; however, subsequent treatment was equally as effective as the first course of injections.

TABLE II. AMBULATORY PATIENTS: ASTHMA-HAY FEVER

AGE GROUP II: 20-40 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
1	F.B.	30	M	6 Yrs.	Very severe	Infection	1–500 2–100 3–250 4–360 5–25 units i.v. 10 days	168–154 — 803–136 638–319	None	Poor	Finally decided to change climate. ACTH and cortone of little aid.
2	F.	29	F	20 Yrs.	Moderate (acute)	Allergy	80	275–143	Severe reaction (immediately after Rx).	Failure	Received one dose only.
3	R.G.	38	F	23 Yrs.	Moderate (acute)	Allergy	160	541–0	None	Excellent	No recurrence since original dose.
4	S.J.	31	F	12 Yrs.	Very severe	Allergy	340	641–319	Generalized muscle cramps	Poor	Patient continued to have discomfort of moderate degree.
5	W.L.	33	M	29 Yrs.	Moderate (acute)	Allergy	180	241–121	Stiffness of joints and muscle tenderness	Moderate	Patient's asthma followed weed hay fever. Relief of asthma only.
6	C.L.	28	M	5 Yrs.	Moderate (acute)	Infection	1–260 2–Cortone 12.5 mgms. b.d.	77–88	None	Excellent	Occasional mild asthma associated with alcohol.
7	J.F.	32	F	5 Yrs.	Moderate (acute)	Allergy	1–260 2–Cortone 12.5 mgms. b.d.	66–99	None	Failure	Treatment gave such transient relief both ACTH and cortone discontinued.
8	M. N.	32	M	1 Yr.	Very severe	Allergy	120	349–11	None	Excellent	No recurrence of asthma.
9	W.P.	37	F	18 Yrs.	Very severe	Primary: Allergy Secondary: Infection	1–160 2–320 3–60 4–80	242–253 319–250 — 451–132	None	Poor	Relief is transient.
10	J.P.	37	M	4 Yrs.	Moderate (acute)	Allergy	160	110–132	None	Excellent	Asthma due to weed pollen.
11	S.P.	29	F	22 Yrs.	Very severe	Primary: Allergy Secondary: Infection	1–160 2–Cortone 25 mgms. b.d. for 8 doses.	484–242	None	Excellent	No return of symptoms followed the outlined therapy.
12	B.W.	33	M	31 Yrs.	Repeatedly status asthmaticus	Allergy	1–920 2–240 3–300 4–840 5–60	55–110 242–41 132–198 — Every wk. May to Oct.—2 yrs.	None	Excellent	Life saved by ACTH. has had no asthma since on annual weekly schedule. 1951-1953
13	S.W.	34	F	22 Yrs.	Very severe	Allergy	1–150 2–220 3–120 4–Cortone 12.5 mgms. AM & PM	363–605 600–0 209–143	None	Excellent	Asthma associated with pollen. Cortone less beneficial.
14	D.Y.	34	F	27 Yrs.	Very severe	Infection	1–360 2–400 3–520 4–580 5–Cortone 25 mgms. b.d.	— 737–22 341–0 —	None	Excellent	No serious discomfort unless infection develops.
15	G.F.	38	M	20 Yrs.	Status asthmaticus	Primary: Allergy Secondary: Infection	1–220 2–640 (in hospital) 3–220 4–40 every 5 days	1155–22 1177–418	None	Excellent	V.C.—2.2 to 4.6 cortone 275 mgms. no relief. Remission for 6 mos. Asthma: associated with pollen.
16	F.B.	36	M	30 Yrs.	Slight to severe	Primary: Allergy Secondary: Infection	1–280 2–Hydrocortone 20 mgms. q. 4 hr. 2 days; 20 mgm. b.d. 4 days; 10 mgms. b.d. for 10 days.	770–253	None	Excellent	Long standing history of asthma. Allergy to ragweeds, inhalants and spores.

Twenty-six patients received their treatment without any side reactions; three patients complained of insomnia, superficial edema, and increase in weight, but a more cautious treatment was subsequently administered without any recurrence. Three patients of the twenty-nine who responded poorly to adequate doses of Cortone prior to Corticotropin therapy are still receiving injections of H. P. Acthar Gel 20 to 60 units every second or third day. Of the twenty-nine patients, only one patient responded poorly to the hormone. To this patient 440 units gave such transient benefit that further treatment was inadvisable. Subsequently, fifteen of the twenty-nine patients were given Cortone or Hydrocortone orally. With no exceptions, they are continuing in a remission.

Typical examples of the accomplishment of the hormone when administered to this age group of

TABLE III. AMBULATORY PATIENTS: ASTHMA-EMPHYSEMA

AGE GROUP III: 40-60 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
1	M.B.	57	M	18 Yrs.	Very severe	Infection emphysema	220	88–0	Edema of extremities	Poor	Rapid development of edema and poor response to the hormone: Treatment discontinued.
2	M.F.	46	F	17 Yrs.	Very severe	Infection	1–640 2–100 3–500 4–480 5–300 6–240 7–Hydrocortone—20 mgm. AM & PM	605–539 286–165 209–88 308–341 176–33	None	Excellent	V.C. 1.1 to 2.4 Returned to former full-time occupation.
3	L.C.	50	M	10 Yrs.	Acute attack	Infection	180	—	None	Excellent	Rapid improvements after 80 units. No recurrence of asthma.
4	L.C.	53	M	16 Yrs.	Moderate	Primary: Infection Secondary: Allergy	1–240 2–140 3–Cortone–12.5 mgms. AM & PM	198–0 165–187	None	Good	Asthma returns if exposed to excess of dust or ragweed pollen.
5	H.F.	43	M	21 Yrs.	Repeatedly status asthmaticus	Infection	1–560 2–160 3–180 4–400	1342–110 — 110–22	None	Excellent	1. Received 1300 mg. cortone with little relief. 2. Received 2000 mg. cortone subsequently little relief. 3. Relapse immediately controlled by ACTH. V.C. 2.5 to 4.2.
6	L.F.	50	F	3 Yrs.	Very severe	Infection	1–380 2–20 two times weekly	—	None	Excellent	Cortone caused oedema. Asthma controlled by ACTH; fluid and salt restricted.
7	G.F.	53	M	7 Yrs.	Very severe	Infection emphysema	1–220 2–Hydrocortone—20 mgms. AM & PM	88–99	None	Excellent	V.C.—2.5 to 3.8 comfortable.
8	F.G.	48	F	48 Yrs.	Very severe	Infection emphysema	1–Hydrocortone—120 mg. (ineffective) 2–120	— —	Insomnia followed ACTH	Excellent	V.V.—1.0 to 1.4 no recurrence.
9	M.G.	59	F	36 Yrs.	Very severe	Infection emphysema	1–310 2–320 3–Hydrocortone—AM & PM	— 438–321	None	Good	Marked mental instability but relief has been maintained after years of asthma.
10	M. G.	59	M	4 Yrs.	Life saving status asthmaticus	Infection emphysema	1–Cortone 200 mg. (ineffective) 2–400 3–525 4–80 units every 5 days 5–Hydrocortone 20 mgm. B.D.	780–20 —	None	Excellent	Originally treated with crystalline ACTH in hospital. Subsequently Rx as ambulatory patient. Excellent control of symptoms.
11	N.H.	51	F	8 Yrs.	Very severe	Infection	1–340 2–480 3–Cortone 25 mgm. daily.	110–60 —	None	Excellent	V.C.—2.0 to 2.9 condition controlled by cortone.
12	A.H.	43	F	6 Yrs.	Very severe	Infection	1–360 2–140 3–Cortone—12.5 mgm. B.D.	1067–583 715–946	None	Moderate improvement	Relapses required repeated courses of ACTH supplemented with cortone.
13	A.H.	43	M	10 Yrs.	Moderate	Infection	1–200 2–60 3–Hydrocortone 20 mgms. B.D.	858–77 250–0	None	Excellent	Symptoms subsequently controlled with ephedrine.
14	M.I.	57	M	8 Yrs.	Moderate	Infection	1–600 2–80 3–180	— 275–77 191–143	None	Excellent	V.C.—2.1 to 3.5 Returned to full time work with occasional mild asthma.
15	S.K.	44	F	26 Yrs.	Life saving status asthmaticus	Primary: Infection Secondary: Allergy	1–240 2–180 3–60 units twice weekly	1265–347 1298–300	None	Excellent	Repeated therapy often hospitalized until schedule twice weekly began.
16	L.K.	49	M	28 Yrs.	Very severe	Primary: Allergy Secondary: Infection	280	748–187	None	Excellent	V.C.—1.9 to 3.9 dramatic relief.
17	C.M.	59	M	34 Yrs.	Very severe emphysema	Infection	1–480 2–300 3–60 4–30 twice weekly	99–143 — 198–132	Superficial edema	Excellent	Patient has followed schedule for 10 mos. with great relief. V.C.—2 to 2.5
18	M. N.	57	F	50 Yrs.	Very severe	Infection	1–140 2–200 3–Hydrocortone 10 AM & PM	418–231–0 528–88	None	Excellent	Complete relief followed second course. Must continue hydrocortone.
19	B.R.	54	F	20 Yrs.	Very severe	Infection	440	143–396	None	Poor	Symptoms somewhat relieved. Rx discontinued. Change of climate helped.

TABLE III. AMBULATORY PATIENTS: ASTHMA-EMPHYSEMA (CONTINUED)

AGE GROUP III: 40-60 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
20	P.S.	45	M	4 Yrs.	Very severe	Primary: Allergy Secondary: Infection	1–800 2–450 3–340 4–260 5–Cortone 25 mgm. AM & PM	— 297–110 — 374–418	None	Excellent	First course in hospital. Subsequent attacks controlled by cortone.
21	L.S.	55	M	38 Yrs.	Repeated status asthmaticus	Allergy	1–1000 2–80 3–Cortone 12.5 mgm. B.D.	1200–300 132–55	None	Excellent	First course in hospital. Subsequently occasional relapse controlled by cortone.
22	R.S.	53	F	5 Yrs.	Moderate	Infection	1–480 2–480 3–Hydrocortone 20 mgm. B.D.	— 1221–220	None	Excellent	Moderate immediate relief. Subsequently much improved.
23	N.S.	57	M	2 Yrs.	Moderate	Infection	120	715–0	Generalized edema. Increased wt. 164 to 174 —3 days.	Failure	Immediately after second dose of 60 units mental confusion and edema developed.
24	M.S.	59	F	8 Yrs.	Very severe status asthmaticus	Infection	1–200 2–260 3–Hydrocortone 10 mgms. AM & PM 4–440 by L.M.D. 5–200 by L.M.D.	650–0 242–0	None	Excellent	Violent attacks while on hydrocortone controlled by ACTH 80–40–40–40.
25	R.T.	54	M	18 Yrs.	Very severe	Infection	360	55–99	None	Excellent	V.C.—2.8 to 3.4 rare dyspnoea since treatment.
26	H.F.	55	F	4 Yrs.	Continuous asthma—status asthmaticus	Infection (chr. sinusitis) emphysema	80 Hydrocortone—10 mgm. AM & PM	1727–800	None	Excellent	Patient also had been on insulin for diabetes. Complete relief after 80 units ACTH & hydrocortone.
27	M. H.	59	F	5 Yrs.	At times incapacitating.	Infection	1–160 2–Hydrocortone 20 mgms. 2–3x q.d. p.r.n.	400–154	None	Excellent	Patient frequently bedridden before hormone therapy.
28	K.R.	48	F	15 Yrs.	Severe	Infection	1–240 2–Hydrocortone 20 mgms. b.d.	121–385	None	Excellent	Patient seriously ill. Had glycosuria 3+, but blood sugar —105 mg.% after each dose ACTH.
29	E.W.	52	F	2 Yrs.	Severe	Infection	1–440 2–Hydrocortone 20 mgms. 2–3x q.d.	187–0	None	Excellent	Previous treatment with oral cortisone gave no relief.

patients (40-60 years) are found in the following brief histories.

Age Group III (40-60 Years)

Case 5.—H.F., a forty-three-year-old man, has had asthma for over twenty years, attacks associated with infection. He was hospitalized by his local physician and given 1,300 mg. of Cortone during a period of two weeks. His relief from this hormone lasted three days; he was readmitted by his physician and was given 2,000 mg. of Cortone, again with transient relief. Subsequently, he was referred to the Johns Hopkins Hospital. Because of the severity of his asthmatic attack he was immediately admitted. His vital capacity was 2.5 liters, fifty per cent of normal. He was given a daily dose of H. P. Acthar Gel and a total of 560 units in sixteen days. On discharge, his vital capacity had attained 4.2 liters and his asthmatic attack had cleared completely. Since his original course of the hormone, he has experienced three relapses, each one responding to H. P. Acthar Gel. The last relapse occurred eleven months ago.

Cas 10.—M.G., a fifty-nine-year-old butcher, has had asthma for the past six years. When originally seen he had well-marked emphysema and was in an acute asthmatic attack, so severe that he was hospitalized because of his failure to respond to the usual asthma therapy. He was given crystallin ACTH in order to relieve status asthmaticus. Two months later he was readmitted to the hospital, again he was given a course of ACTH which again brought dramatic relief. Since the second hospitalization, this patient has received H. P. Acthar Gel every four to five days and has been in relatively good health. He has had no incapacitating attacks of asthma for the past twelve months.

Case 14.—M.I., a fifty-seven-year-old man, has had asthma for nine years. There is a past history also of urticaria and rhinorrhea. Infection is the basis of his asthmatic attacks. When first seen the patient was hospitalized and given a course of crystalline ACTH. Improvement was so pronounced that on discharge it was unnecessary to maintain him on any type of medication. The first course of ACTH was administered in

October 1950. He required no more until January 1952, then only three doses. Subsequently, he has had two relapses and has been given 80 units and 180 units of H. P. Acthar Gel, respectively. This patient has been able to resume full-time work, and is free of asthma unless he contracts a respiratory infection.

Case 15.—S.K., a forty-four-year-old woman, has had bronchial asthma for twenty-six years. Attacks are severe, incapacitating, and usually lead to hospitalization. Treatment in the past has been with the usual anti-asthmatic medications and prolonged administration of oxygen. During a recent hospitalization, this patient almost expired in acute asthma but recovered rapidly after the administration of H. P. Acthar Gel. When discharged from the hospital, she continued to take 60 units H. P. Acthar Gel twice a week for a number of months. More recently she has taken 25 mg. of Cortone twice daily. As soon as this hormone loses its effectiveness, she administers to herself 60 units of H. P. Acthar Gel twice each week. There is usually a period of from twenty to thirty days between these supplementary treatments.

In summary, this patient is an individual having severe infectious asthma and emphysema for whom ACTH proved to be life-saving. Through its use a life of invalidism has been converted to one of normal activity.

Case 17.—C.M., a fifty-nine-year-old man, has been under observation since 1949. For thirty years he has had exertional dyspnea, and from 1946 to 1949 even slight exertion was accompanied by shortness of breath. Examination revealed an asthmatic bronchitis and advanced emphysema. His vital capacity had been comparatively good, three liters, but in spite of the best therapy available, including expiratory exercises to reduce the pulmonary distention, in two years, the three liters decreased to two. A decision to administer H. P. Acthar Gel was made in December 1952, and he was given his first two doses, 80 units the first day, 60 units the second day. The relief obtained was so satisfactory that with the return of his symptoms one week later, 30 units every third day was considered a safe and beneficial dose. This schedule has been maintained for ten months. His eosinophil response has been inconsistent; his vital capacity remains unchanged. But he breathes with greater comfort and carries on his daily responsibilities as executive of a large manufacturing industry.

Case 18.—M.N., a fifty-nine-year-old woman, has had perennial asthma related to upper respiratory infections for fifty years. The physical examination disclosed evidence of bronchial asthma and emphysema. After 140 units of H. P. Acthar Gel she was much improved, but she had one relapse, requiring a second course of 200 units. Subsequently, for five months she has been free of discomfort on 10 mgms. of Hydrocortone morning and evening. This patient is an example of an asthmatic type that heretofore had progressively advanced to total invalidism.

Case 24.—M.S., a fifty-nine-year-old woman, has had asthma for eight years. In 1948 the attack was so severe that she went to Tucson for six months. Here she experienced improvement. After her return to the East, she had no further distress until exposure to varnish fumes in February 1952. This exposure precipitated an attack which failed to clear because of the secondary bronchial infection that followed. The patient received prompt relief after the first course of 200 units of H. P. Acthar Gel. In fact, for two months after the initial course she was free of all discomfort. Then another attack occurred, and this time she was given Cortisone orally, but there was no relief of the asthma. In January 1953, she was given a second course (260 units) of H. P. Acthar Gel, again with complete relief. Once again she remained asthma free for two months, then another severe attack occurred even though she had been taking 20 mgms. of Hydrocortone daily. Again she was given the hormone (440 units) but this time she experienced relief for only one month. In May 1953 she was given a fourth course of H. P. Acthar Gel (200 units). Her progress since this fourth course has been marred by two relapses, each controlled immediately by 200 units of the hormone given in broken doses during four days. This patient has made an excellent response to her repeated courses of ACTH, whereas treatment with Cortone and later with Hydrocortone proved ineffective.

Case 26.—H.F., a fifty-six-year-old woman, has had chronic sinusitis most of her life. In 1948 she developed asthmatic bronchitis and attacks of bronchial asthma which became increasingly troublesome. A survey disclosed that she also had a moderately severe diabetes. She was admitted to the hospital for control of this problem, a control accomplished by Globin Insulin. The relief of the sinusitis by radical operation had no effect on the asthmatic symptoms. The patient was finally given a course of H. P. Acthar Gel (200 units) with excellent response and with no adverse change in the well-controlled diabetic condition. She has had one relapse requiring 200 units of the hormone, but for five months all symptoms have been controlled by Hydrocortone, 10 mgms. morning and evening, and at the same time her blood sugar is 129 mgms. per cent on 22 units of Globin Insulin daily.

The last age group, sixty to eighty years, is the most interesting of the four groups. Every known therapeutic measure had been used, and had finally failed to relieve these aged patients now completely incapacitated by emphysema and asthmatic bronchitis. Then H. P. Acthar Gel was administered. There were twenty-six patients—twelve female; fourteen male—with an average age of seventy-three years. The oldest patient was seventy-eight years; the youngest sixty-one years. In every case the symptoms were most disturbing, with dyspnea of such severity that a diagnosis of

status asthmaticus was tenable in a number of the acute attacks that occurred intermittently.

The duration of symptoms was as follows: Seven patients had become progressively more uncomfortable during a period of thirty or more years; nine patients during ten or more years; and ten patients during one or more years. With one exception, infection was the primary etiologic factor; the exception, age seventy-five, had suffered with pollen hay fever for many years and had gradually developed seasonal bronchial asthma and emphysema in spite of specific desensitization with ragweed pollen extract.

Treatment was administered without any side effects; the results were excellent in twenty-four patients, poor in two. These twenty-four patients progressed from chronic invalidism to comparatively comfortable health and well-being. Ten patients, now entirely free of discomfort, are on maintenance doses of Hydrocortone, 10 to 20 mgms. twice daily. Of the group of twenty-six patients, seven who derived no relief from Cortone, are taking daily, or three times weekly, or twice weekly, 40 to 80 units of H. P. Acthar Gel administered on schedule just as one might administer insulin to the diabetic patient. Relapses occurred repeatedly in seventeen patients. Of these seventeen, one patient, age sixty-eight, who had repeated attacks of status asthmaticus required nine courses of the hormone—a total of 2,600 units—to secure complete freedom from symptoms. Neither Cortone nor Hydrocortone could be tolerated because of the rapid development of edema and depression. At the present time she is in her longest remission.

The clinical history and course of several of these patients is most instructive:

Age Group IV (60-80 Years)

Case 2.—M.C., a sixty-eight-year-old woman, has had emphysema and frequent severe asthmatic attacks since 1949, always related to upper respiratory infection. In the past, relief had been obtained by the administration of intramuscular penicillin, because ephedrine, aminophyllin and adrenalin had lost their effectiveness. This patient has had repeated courses of H. P. Acthar Gel with a remarkable response each time. She comes to the office for booster injections from one to three weeks and is able to lead a normal life for a person of this age group. She has thus far received 2,600 units with no complications or local reactions. Cortone and Hydrocortone produce edema and mental depression; consequently, these hormones must be avoided in her case.

Case 5.—J.E., a seventy-eight-year-old man, has had infectious asthma and emphysema for 13 years. During acute severe attacks he has been given H. P. Acthar Gel with complete relief each time. The patient also had a coronary occlusion in 1950; therefore, it is essential that his asthma be kept under control because of the heart condition. The administration of ACTH has produced no harmful effect on the cardiac condition. With each relapse his respiration has been completely relieved by a short course of ACTH gel.

Case 6.—F.C., a seventy-one-year-old woman, has had infectious asthma and emphysema for more than forty years. She is a native of Colombia, South America. Her attacks are related to upper respiratory infections. In the past the patient had been treated with various anti-asthma medications of the usual type with unsatisfactory relief. After an absence of three years she returned to the United States with evidence of increased emphysema and bronchial asthma. She was started on a course of H. P. Acthar Gel given regularly for approximately two months. At the end of this time she was completely free of discomfort and able to carry on her usual physical activities. She has returned to South America and is receiving 80 units of H. P. Acthar Gel twice weekly with complete relief of her asthmatic distress.

Case 8.—A.H., a sixty-eight-year-old woman, has had asthma and emphysema due to infection for thirteen years. In the past she has obtained improvement from the administration of penicillin and sulfamerazine, which have been administered during upper respiratory infections. For a period of four years the patient used a number of anti-asthmatic preparations particularly aminophyllin suppositories with fair results, but in late 1952 was given a course of H. P. Acthar Gel because all other treatment had failed. This treatment extended into January 1953, at which time she became entirely free of asthmatic symptoms. Since then she has continued to take 60 units of H. P. Acthar Gel twice weekly and has obtained complete relief of her asthmatic distress.

Case 9.—G.K., a sixty-three-year-old man, had his first asthmatic attack in 1940. Since then his spells have been frequent and non-seasonal. Usual anti-asthmatic medications have given only temporary relief. The patient was given a course of ACTH in oil, total of 800 mgms. with marked improvement. He was free of asthma for eighteen months and carried on his occupation as a salesman. He then contracted a respiratory infection, severe asthma recurred, and he was given a second course of H. P. Acthar Gel, 120 units in divided doses of 60 units each. Marked improvement followed the first dose.

This patient represents an infectious bronchial asthmatic who, after two courses of ACTH, one long course, the second very short, made remarkable improvement. After thirteen years of discomfort, he remains completely free of symptoms.

TABLE IV. AMBULATORY PATIENTS: ASTHMA-EMPHYSEMA

AGE GROUP IV: 60-80 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
1	C.B.	64	F	2 Yrs.	Very severe	Primary: Infection	1-200 2-220 3-Hydrocortone 20 mgm. B.D.	737-44 0-0	None	Excellent	V.C.—1.5 to 1.9 Cortone maintains relief unless infection develops—relief obtained by hydrocortone.
2	M.C.	68	F	4 Yrs.	Repeatedly status asthmaticus	Infection emphysema	1-720 2-500 3-80 4-380 5-180 6-160 7-180 8-260 9-140	286-121 1012-506 594-847 737-374 407-451 286-319 407-582 264-198 —	None	Excellent	Cortone—Failure. caused oedema. intervals between relapses depend on infections. V.C.—1.2. Excellent condition—6 mos.
	A.G.	73	M	24 Yrs.	Very severe	Infection emphysema	1-1005 mg.—Cryst. ACTH in Hosp.—1st Course 2-840 3-480 4-360	220-187 341-440 462-231	None	Fair	Recurring asthmatic spells in spite of therapy. V.C.—1.5 to 2.2.
4	F.C.	64	M	31 Yrs.	Very severe	Infection emphysema	1-160 2-Hydrocortone 20 mg. B.D.		Tachycardial tremor	Poor	Has had nodular thyroid; no relief from ACTH—nor hydrocortone.
5	J.E.	78	M	13 Yrs.	Very severe	Infection emphysema (coronary occlusion) 1950	1-280 2-240 3-120 4-110 5-Hydrocortone 10 mgm. AM & PM	198-88 165-66 111-33 429-33	None	Excellent	Attacks: Paroxysmal but prolonged prior to ACTH. Immediate relief. V.C.—1.6 to 2.6.
	F.C.	72	F	44 Yrs.	Very severe	Infection emphysema	1-760 2-Hydrocortone 20 mg. AM & PM 3-460 4-80 twice weekly	318-0 209-341	None	Excellent	Before treatment: Patient completely incapacitated hy slight exertion. Cardiac function good. V.C.—0.9 to 1.5.
7	M.F.	65	F	6 Yrs.	Very severe	Infection emphysema	1-80 2-220 3-100 4-80 5-Hydrocortone 10 mg. AM & PM	— 781-418 451-473 —	None	Excellent	V.C. unchanged—1.2 controlled completely after initial therapy with hydrocortone.
8	A.H.	68	F	13 Yrs.	Moderate with acute paroxysms	Infection	1-60 2-120 3-60 twice weekly	1023- 605-484	None	Excellent	V.C.—1.7—Unchanged. Treatment twice weekly gives complete relief.
9	G.K.	63	M	13 Yrs.	Very severe	Infection	1-800 2-120	1001-902 539-220	None	Excellent	Remission: 18 mos. between treatment 1 and treatment 2.
10	J.L.	62	F	48 Yrs.	Very severe	Infection emphysema	1-230 2-Cortone—12.5 mgm. Q.D.	682-187	None	Excellent	Relief after 15 yrs. Usual type therapy and cortone failed prior to ACTH.
11	H.L.	64	M	11 Yrs.	Moderate	Infection	360	341-121	None	Excellent	Occasionally asthmatic. Relief hy cortone 25 mgms. AM & PM.
12	M.K.	63	F	38 Yrs.	Very severe	Infection emphysema	1-560 2-Cortone 25 mgm. intermittently 3-180 4-Cortone 12.5 mg daily	682-0 —	None	Excellent	Cortone has controlled symptoms 12.5 mgms. daily
13	H.P.	63	F	2 Yrs.	Very severe	Infection emphysema	1-320 2-Cortone 12.5 mgm. AM & PM	451-11 374-33	None	Excellent	V.C.—1.9 to 2.4 no relief from routine treatment. Given ACTH, has had a long remission.
14	A.P.	65	M	5 Yrs.	Very severe	Infection emphysema	1-600 2-600 3-60 daily 2 wks. then 60 weekly	— —	None	Fair	Cortone between treatment 1 and treatment 2 (25 mgms. q. 6 hrs.) failed to relieve.
15	H.R.	75	M	35 Yrs.	Very severe	Primary: Allergy Secondary: Infection	1-220 2-Hydrocortone 20 mgms. AM & PM	396-242	None	Excellent	Asthma associated with hay fever.
16	E.S.	65	F	5 Yrs.	Moderate	Infection	1-100 2-60 3-140 4-Hydrocortone 10 mgms. AM & PM	770-407 242-0 —	None	Poor	Frequent relapses.
17	C.T.	61	M	2 Yrs.	Moderate	Infection emphysema	1-320 2-60 every 5 days AD 300 units	726-11	None	Excellent	V.C.—2.1 to 2.7 completely relieved following radical sinus operation.

TABLE IV. AMBULATORY PATIENTS: ASTHMA-EMPHYSEMA (CONTINUED)
AGE GROUP IV: 60-80 YEARS

No.	Name	Age	Sex	Duration of Asthma	Severity of Symptoms	Etiology Allergy and/or Infection	ACTH Gel Therapy Total Dosage (Units)	ACTH Gel Therapy Eosin (Response)	Side Effects	Results	Remarks
18	C.W.	62	F	5 Yrs.	Status asthmaticus	Infection emphysema drug sensitivity.	1-ACTH—Cryst. 900 (hospital) 2-ACTH—Gel 605 (hospital) 3-260	242-132 4-Cortone 25 mgms. daily.	None	Excellent	V.C.—1.4 to 1.9. ACTH twice was life-saving. Now complete relief on cortone—25 mgms. daily.
19	W.W.	64	M	54 Yrs.	Status asthmaticus	Infection emphysema	1-ACTH—Cryst. 900 (hospital) 2-460 3-320 4-140	429-99 154-66 —	None	Excellent	V.C.—0.7 to 3.0 incapacitated for 10 yrs. prior to ACTH. Remission.
20	H.W.	61	M	3 Yrs.	Status asthmaticus 10 days	Infection emphysema excessive adrenaline treatment	1-300 2-120 3-220	— 935-594 506-165	None	Excellent	V.C.—2.0 to 3.7 for 10 days treated with I.V. aminophyllin, aqueous adrenaline and digitalis in 02 tent. Cardiac impairment as a result. After 80 units ACTH immediate relief. Long remissions subsequently.
21	O.F.	73	M	14 Yrs.	Very severe	Infection	1-Oral cortone 50 mgms./day 2-120 3-9/52-4/53 40 units q.4 days. Gradually reduced to 40 units 2x wk. Cont. indefinitely		None	Excellent	1. Cortone demonstrated true diabetes. 2. ACTH & insulin controlled asthma and diabetes. 3. In spite of ACTH therapy patient developed thrombocytopenic purpura.
22	H.P.	65	F	12 Mos.	Severe	Infection	1-440 Hydrocortone 20 mgms. 2-3x q.i.d. 2-160 Hydrocortone 20 mgms. b.d.	2321-572 856-0	None	Excellent	ACTH also controlled her nasal symptoms which consisted of excessive watery discharge.
23	M.K.	61	F	14 Yrs.	Severe	Primary: Infection Secondary: Allergy	1-200 2-Hydrocortone 20 mgms. b.d.	418-554	None	Excellent	Allergy to dust.
24	F.C.	64	M	60 Yrs.	Severe	Infection	1-320 2-40 units 3x per wk.	0-341	None	Excellent	Patient has had severe asthma and emphysema most of his life requiring hospitalization on numerous occasions.

Case 10.—J.L., a sixty-two-year-old woman, has had asthma for forty-eight years, that is, since the age of fourteen. Her symptoms for a number of years occurred only during the ragweed season, but during the past four years she has complained constantly of shortness of breath of an asthmatic type, both night and day. All medication previously administered failed to relieve her. Cortone was prescribed by her physician in adequate dosage, but she derived little relief. The examination failed to confirm the first impression that allergy played a part. She was given a course of H. P. Acthar Gel, a total of 230 units. Her eosinophil count of 682 dropped after the first dose to 187 cells. No reaction followed her treatment, and the result has been excellent. Subsequently, 12½ mg. of Cortone was prescribed as a daily dose. Although Cortone failed to relieve her prior to ACTH administration, this drug now is maintaining her free of any discomfort. She is in the midst of a long remission.

Case 19.—W.W., a sixty-four-year-old man, has had asthma for fifty-four years. His attacks are related to infection, and there is also the complication of emphysema. When first seen, he had been practically incapacitated for ten years. He was hospitalized September 1950, and given a course of crystalline ACTH. There was gradual and impressive improvement, both in physical signs and in exercise tolerance. He recovered to the degree that he was able to take respiratory exercises for the emphysematous problem, and upon discharge was quite comfortable. He remained free of discomfort for one year, then, he contracted a cold and once again had severe asthma. This was controlled readily with a course of H. P. Acthar Gel. Since then he has been given short courses at intervals, each time with equally beneficial effect.

Except for relatively minor attacks during upper respiratory infections, this man has had continuous remission for more than three years.

Case 21.—O. F., a seventy-three-year-old man, has had asthmatic bronchitis with emphysema since age fifty-nine. During the past ten years his discomfort increased until he was completely incapacitated in spite of heroic therapeutic measures. On examination he had marked emphysema with asthmatic bronchitis; a blood

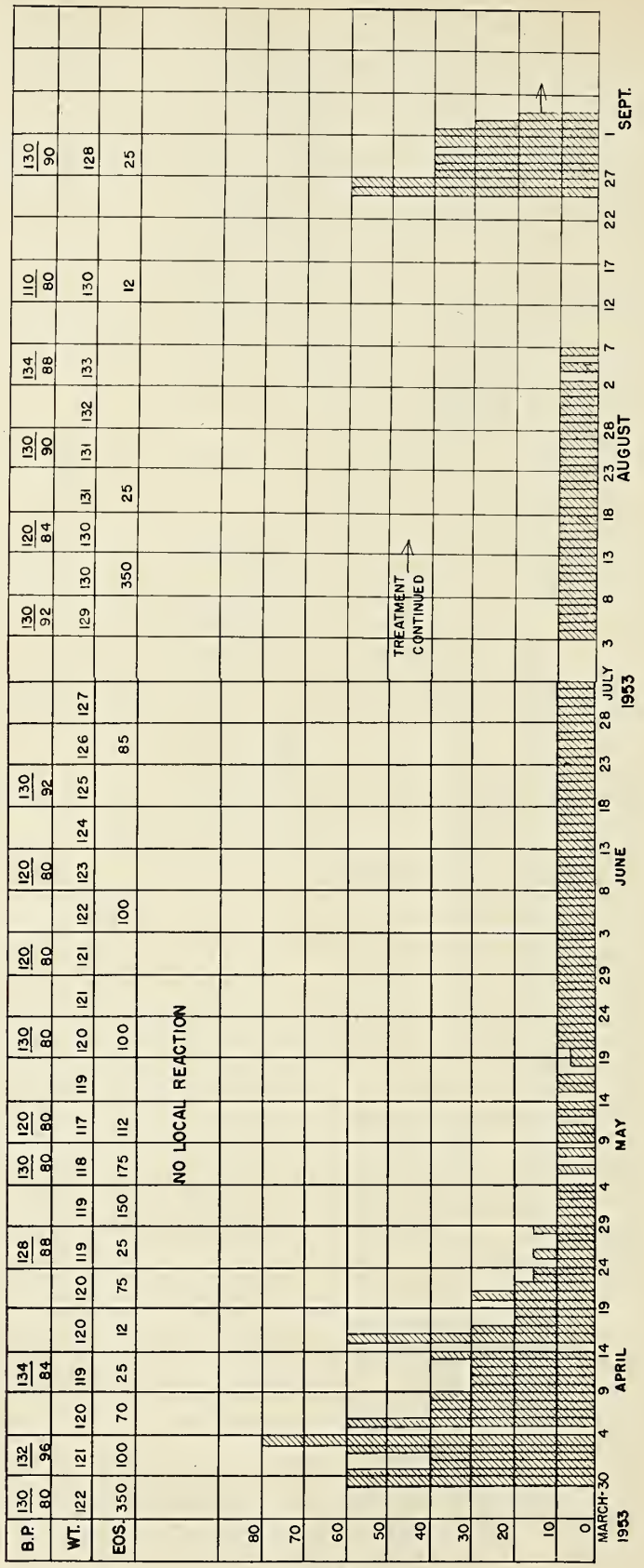


Chart 1. Case 25. J. B., aged seventy. Duration of symptoms: fourteen years. ACTH: total dosage: 2,286 units in three months.

pressure of 176/90. His vital capacity was 2.3 liters. His blood chemistry was normal. In April 1952 his physician prescribed 25 mgms. of Cortone twice daily. A check of his blood sugar two days after he began this therapy was 188 mgms. per cent, but by May 31 this figure had increased to 342 mgms. per cent and his cholesterol had risen to 1,390 mgms. per cent. Cortone was immediately discontinued and he was placed on 25 units of protamine insulin daily. His blood sugar and glycosuria rapidly returned to normal, but his asthmatic condition became alarmingly aggravated. Therefore in September 1952, without any change in insulin, he was given 60 units of H. P. Acthar Gel; on the second and third days he was given 30 units; his total dosage during the three days was 120 units. This dosage gave immediate relief, and he began a schedule of 40 units every four days. His blood pressure was stationary at 180/90 and his blood sugar was 182 mgms. per cent. On April 23, 1953, he returned for further study—his asthma was under complete control, as he had continued the 40 units of H. P. Acthar Gel twice each week for six months. On examination a large blood blister was discovered in the mucous membrane of his mouth, large areas of purpura were present under his dental plate, and his body was covered with many fine purpuric lesions. His blood pressure was 200/90. His spleen was not enlarged. His blood morphology was as follows:

WBC	12,700
RBC	5,420,000
Differential—	Normal
Platelet Count—	10,000 cells
Hgb.	14.0 grams
No retraction of clot	

He was admitted to the Johns Hopkins Hospital for study. His history revealed a four-day course of Chloromycetin in March 1953, a month prior to this examination. The more likely cause of his purpura was PHE-MER-NITE, for this drug contains Phenyl-mercuric nitrate, Benzocaine, and methyl salicylate. Unknown to his physician, the patient had been taking the drug for several months to control a cough. Three weeks after admission to the hospital, his platelets had increased to 70,000 cells and in general he was much improved. In September 1953, his platelet count had increased to 250,000 cells.

In summary, he had continued his 40 units of H. P. Acthar Gel twice weekly and his insulin 25 units daily, even while his purpura was developing. He continued these drugs during his hospitalization and subsequent to discharge. His asthmatic condition is completely controlled to this date by 40 units of H. P. Acthar Gel twice weekly.

Case 20.—H.W., a sixty-one-year-old man, has had asthma for approximately twenty-five years, and treatment with the usual medication had given temporary and usually satisfactory relief until November 1952. At that time, the patient experienced a severe attack. He was hospitalized, and was given so much adrenalin during a period of seven days that he developed marked tachycardia and increasingly severe dyspnea. His past history is important: as a young man he had had rheumatic heart disease; because of this background, his physician was fearful that the cardiac complication was responsible for his respiratory distress. However, as the lesser of two dangers, a course of H. P. Acthar Gel, a total of 300 units, was administered. Two hours after his first dose of 80 units, he rested comfortably for the first time in two weeks. After one week he left the hospital completely free of asthmatic dyspnea. His cardiac function returned to normal, and he was in excellent health until he developed an acute sinusitis followed by severe asthma in April 1953. A second short course of H. P. Acthar Gel (120 units) gave him immediate relief. Since April he has had two relapses—the first associated with an acute sinusitis which required 120 units; the second developed after a bronchial infection which necessitated 220 units to relieve him of a severe attack of asthma. He has remained asymptomatic for the past four months and is able to carry on his usual routine.

Case 25.—J.B., a seventy-year-old retired officer, enjoyed excellent health throughout his military career. Twenty years ago he had a sinusitis which flared up from time to time. In 1938 he stopped smoking because of a low-grade chronic cough. His present illness began insiduously about thirteen years ago with shortness of breath on exertion.

In 1946 he retired from the army because of a chronic bronchitis which was believed to be of an asthmatic type. His breathing had become progressively more difficult, so that at times even without activity he had considerable discomfort. He had been extensively investigated, and had been treated with many of the generally recognized measures. X-ray of his chest showed marked emphysema. The electrocardiogram as early as 1945, showed a defective intra-ventricular conduction, and these changes had persisted to date of examination. He had required numerous and prolonged hospitalizations during which time he was confined to his bed and had often required oxygen therapy.

When first seen, this patient was so weak that he was unable to stand without support. His examination revealed an undernourished, dyspneic individual much older in appearance than his age. There was considerable cyanosis of his lips and nail beds, and there were numerous dilated venules over his skin. The chest was held in almost complete inspiration and breath sounds were absent throughout the lung fields. Fine wheezes on expiration could be heard when forced expiration was made with the help of an assistant. Pulmonary function studies showed a marked decrease in the expiratory reserve, inspiratory reserve, vital capacity, and maximum breathing capacity.

Treatment with H. P. Acthar Gel was started March 30, 1953, and was given in accordance with the schedule dosage outlined on the attached chart. Total eosinophil count prior to treatment was 350 cells. After five days the count fell to less than 100, and with a single exception, remained at this level or below throughout therapy. The dosage of ACTH therapy was diminished to 10 units a day by early May. As the patient showed

remarkable improvement on this therapy, it was decided to try discontinuing treatment during the month of May. However, this attempt was unsuccessful, and the dose of 10 units of ACTH was continued from May 20 to hormone therapy, the H. P. Acthar Gel caused no other complications. Since his pulmonary function was so reduced and his physical capacity to move so restricted, the treatment, though a risk, was justified. At

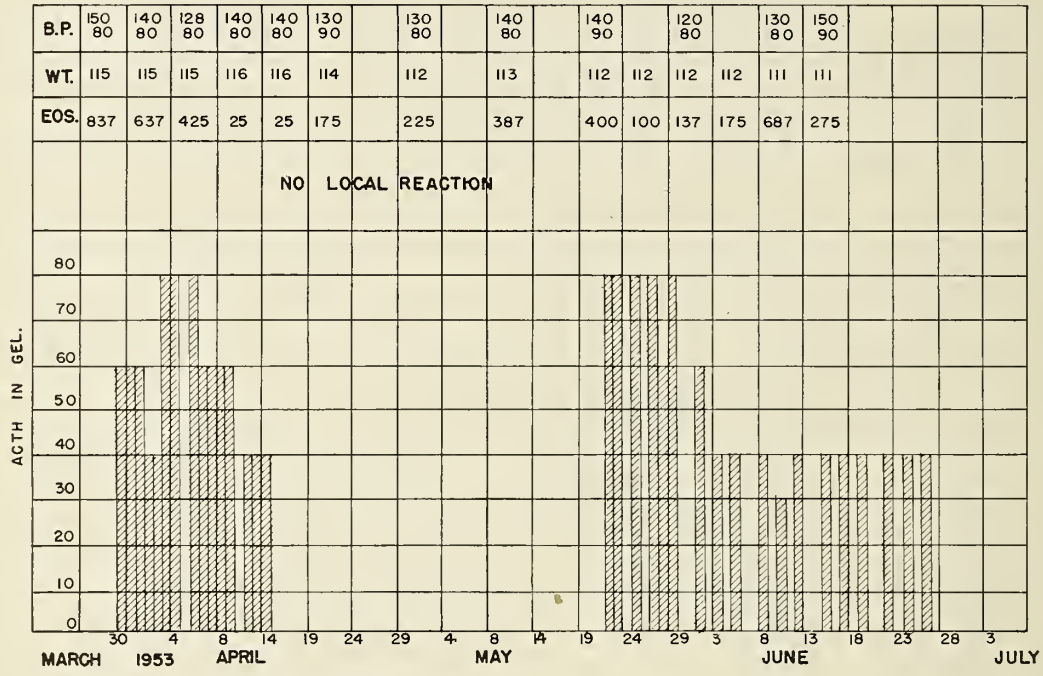


Chart 2. Case 26. H.H., aged seventy-eight. Duration of symptoms: eleven years. ACTH: total dosage: 1,170 units in three months.

until early August, at which time he sustained a compression fracture of the seventh dorsal vertebrae, the result of a fall. The ACTH was gradually discontinued over a period of days. Soon, the patient experienced his former discomfort and was so completely miserable that August 26 he requested ACTH therapy be re-instituted. The drug was started at once, and he responded dramatically but not so completely as when this therapy had been first instituted in March 1953.

The drug was continued on a gradually diminished dose, as shown on the attached chart, until September 6. On that day there was a sudden increase in temperature, and the patient developed a respiratory infection. He was admitted to the hospital at once, but the infection spread to both lungs and he died as the result of an acute bilateral bronchial pneumonia.

The response of this patient to ACTH had been extremely gratifying, for it had converted him from a bed-ridden invalid with severe dyspnea, night and day, into a patient who could walk about the house, could enjoy rides in his car, and even participate in minor physical activities. From March, 1953, to September, 16, he enjoyed greater comfort and more freedom from pain than he had experienced at any time throughout the previous five years.

It is futile to speculate as to whether the hormone was indirectly responsible for his vertebral fracture. Aside from the osteoporosis, which was present prior least, ACTH gave him almost six months of life lived in the normal, active way that means much to this type of person.

Case 26.—H.H., a seventy-eight-year-old retired army officer, enjoyed excellent health throughout his military career. His present illness began insiduously about eleven years ago at which time he complained of shortness of breath on exertion. In 1949 he developed noticeable shortness of breath, cough and wheezing, even while at rest.

Many types of therapy for the control of his dyspnea have been administered. X-ray of his chest early in his illness revealed marked emphysema with a very low diaphragm. Early in 1953, he developed progressively severe shortness of breath requiring repeated hospitalizations. He became completely refractive to all medication, and prior to the onset of ACTH therapy he was unable to walk more than a few steps, therefore, was confined to bed most of the time.

His examination revealed an undernourished man with marked emphysema and an asthmatic bronchitis. Studies of pulmonary function showed marked diminution in the expiratory reserve and vital capacity.

H. P. Acthar Gel therapy was started on March 30, 1953, and was given in accordance with the attached outline as marked on the chart. Total eosinophils, which were 837 per cu. mm., fell to 25 per cu. mm. within

a period of ten days. The response to therapy was dramatic, and showed an improvement in all pulmonary function studies as well as marked improvement in his clinical state. On April 17 he developed a hemolytic staphylococcus aureus infection, and ACTH therapy was discontinued. Antibiotics cleared the infection within a few days, and he also had a remission as far as his respiratory difficulty was concerned for a period of several weeks.

On May 22 there was a return of his pre-treatment status, and ACTH therapy was again instituted. His response was again dramatic, but on June 26 he developed pneumonia in the left lower lobe with pleural effusion. He was hospitalized and treated with antibiotics. His recovery was rapid. Since this infection, he has been in a remission which has continued to the present date. He is now ambulatory and requires no special medication. Just how long this excellent result can be maintained is a problem that only the future can answer.

From the eleven histories of twenty-six cases in Age Group IV (60-80 years) that are presented, it is observable that many of these patients have been treated for an intractable disease. In spite of numerous complications, hypertension, diabetes, coronary occlusion, chronic sinusitis and marked emphysema, and frequent contraindications, treatment has been continued with cautious observation and has effected astounding relief and resulting well-being. In no instance was a complication aggravated. Instead, the relief of dyspnea, in all probability, prolonged rather than shortened the life of the patients. H. P. Acthar Gel should be used as a means of controlling these distressing symptoms just as insulin is used as a means of controlling the diabetic syndrome. Cautious administration and accurate dose determination are prerequisites before insulin is prescribed. The same considerations must be given to continued use of H. P. Acthar Gel.

In conclusion, the excellent results obtained from H. P. Acthar Gel; the ease of administration; the economy for the chronically ill ambulatory patient warrant the opinion that a drug of great value is available to the careful physician. The relapses that occurred in the asthmatic group of patients were relatively mild and easily controllable, irrespective of the previous dosage. Experience suggests that the disease does not become resistant to the hormone after repeated administration. Sensitization has not been encountered, but with accumulation of additional patients, it may be. More serious complications following hormone therapy in any chronic disease must be anticipated constantly. Certainly, in this group of patients the severity of the disease warranted each risk.

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FINANCIAL REPORT

General Foods Corporation reports for the quarter ending June 30, 1953:

Earnings before taxes	$16,151,197.00
Taxes	10,202,452.00
Net Earnings	5,953,765.00
Dividends Common Stock	2,760,000.00

Taxes almost four times the dividends.

The total internal revenue collections in the United States for the fiscal year ending June 30, 1952, amounted to slightly more than $65 billion. The total amount of federal grants-in-aid and payments to individuals (other than loans or wages) for the same year was $4.241 billion. In other words, the misnamed "federal aid" amounted to 6.52 per cent of the total tax collections. In 1951 the percentage was 9.42 and in 1950, 14.16. Thus it is seen that the trend is definitely downward so far as any return of federally-collected taxes to states and individuals is concerned.

The picture with respect to Michigan is even more striking. Here is the story for the past three fiscal years:

In 1950, Michigan ranked fifth among the forty-eight states in total federal internal revenue collections—and 46th in percentage of total collections returned to the State. Only Delaware and New York received a lower percentage of return.

In 1951, Michigan ranked third among the forty-eight states in total federal internal revenue collections—and 47th in percentage of total collections returned to the State. Only Delaware received a lower percentage of return.

In 1952, Michigan ranked fourth among the forty-eight states in total federal internal revenue collections—and 46th in percentage of total collections returned to the State. Only Delaware and New York received a lower percenage of return.

Whereas, the national average of return in 1950 was 14.16 per cent, Michigan received only 6.45 per cent return in grants-in-aid and payments to individuals. The national average of return in 1951 was 9.42 per cent—Michigan received only 3.47 per cent. Last year the national average was 6.52 per cent—Michigan received only 2.45 per cent return.—Congressman Paul Shafer, *Washington Letter.*

The Ballistocardiogram: Its Role in Heart Disease

By Jack M. Kaufman, M.D., Nancy T. Caputo, M.D., and Santiago A. Sanchez, M.D.
Detroit, Michigan

OCCASIONALLY the clinician is confronted by a patient with complaints of vague pains around the precordium. Physical examination, chest x-ray, electrocardiogram, and other studies reveal no abnormalities. More often the clinician sees a patient whose symptoms are those of a typical or atypical angina, but in whom physical examination and usual laboratory tests are again non-informative. In the first case there may be a dilemma in deciding whether heart disease is present; in the second case the threat of sudden death may be levied on a patient whose future course may be uneventful for many years. The ballistocardiogram, a method of recording graphically the efficiency of the heart as a pump, appears to be a feasible laboratory aid in such delicate diagnostic and prognostic situations, and for the evaluation of known heart disease.

Development of Ballistocardiography

In 1939 Isaac Starr originated the term ballistocardiogram. Its derivation is from the Greek: *ballein*—to throw, *kardia*—heart, and *gramma*—a drawing. Literally, then, it means a drawing of the heart's throwing; i.e., a record of the body movements produced by the heart beat. Anyone can see this movement for himself by standing very still on a bathroom scale and observing the slight deflections of the pointer occurring with each pulse. The record of this movement, magnified several thousand times, is a ballistocardiogram.

Gordon, in 1877, published a paper entitled "On Certain Molar Movements of the Human Body Produced by the Circulation." He observed that while lying in bed at night, the springs of his bed seemed to squeak with each heart beat, and also that his leg crossed over his knee seemed to move with each heart beat when he sat quietly. By suspending a bed from the ceiling with four ropes and attaching it to a kymograph by a set of levers he had a device for recording these movements. Work on the science remained stationary until 1905, when Henderson noted the same phenomenon and constructed a similar apparatus. He showed that the motion of the device followed Newton's law—"for every action there is an equal and opposite reaction;" thus a headward surge of blood would produce a footward movement of the body. Other investigators recorded the movements of the body while sitting on a spring scale, while lying on planks supported by corks, and many other ingenious methods.

In searching for a simple but accurate method for estimating the cardiac output, Isaac Starr came upon ballistocardiography. In his early work he thought ballistocardiography provided a simple method for this purpose, but he later showed that the accurate measurement of cardiac output with the ballistocardiogram is limited to normal subjects. Since then his work has contributed significantly to the physiological and clinical aspects of the field. A tremendous impetus to the field came recently with the development of techniques for recording the ballistocardiogram directly from the body. These methods have made ballistocardiogram recording practical at a low cost to any clinician who owns an electrocardiograph.

Recording devices used in obtaining ballistocardiograms can be divided into two broad types: suspended or mobile tables, and direct body types.

One of the first suitable apparatuses using a suspended table was constructed by Starr.[21] Patterned after Henderson's 1905 model, his apparatus consists of a piece of plywood suspended from the ceiling by four wires. Lateral motion is prevented by struts to the adjacent wall, and head-footward motion is imparted through a strong spring so that the frequency of the table is twelve to fifteen cycles per second. This frequency was selected as one which permitted tracing to be recorded during respiration, yet still producing accurate tracings of body movements with as few after vibrations as possible. Nickerson, in 1944, modified Starr's table by critically damping it to a low frequency.[18] Other special table types include vertical, tilting, and torsion tables.

Dock and Taubman have described three ingenious methods for recording the ballistocardiogram directly from the body.[6] Their methods are based on the following fact: when the body lies

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on a smooth solid surface, it glides back and forth on its viscous subcutaneous tissues in response to each cardiac and respiratory cycle. In one method a cross bar housing two small copper generating coils is placed over the patient's shins. Between these coils on a stand (not touching the patient) is suspended a flat fixed magnet. Movement of the body causes the coils to move and cut the lines of force of the magnet, generating a current which can be recorded on an electrocardiograph or suitable machine. Similar apparatuses use a piezo-electric crystal type of pickup, or a photo-electric cell. Another method uses a glycerin filled capsule held against the head; the pressure changes in the fluid system produced by body motion are recorded by a special device.

Standardization of the ballistocardiogram is accomplished by tapping the shoulder with a known force and applying a standard millivolt stimulus through the electrocardiogram machine.

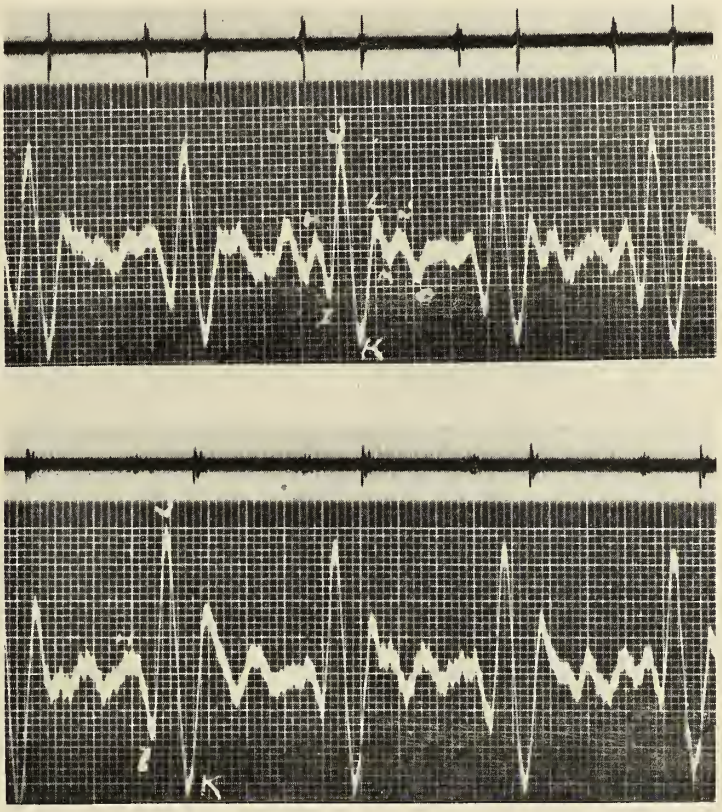


Fig. 1. Normal ballistocardiogram of a white woman, aged twenty-nine. The first heart sound corresponds with the H wave and helps to identify the waves. Above—expiration. Below—inspiration.

Physiology of the Normal Ballistocardiogram

The normal ballistocardiogram consists of a sequence of prominent waves occurring during different phases of cardiac systole followed by a series of ordinarily smaller waves concomitant with diastole. The systolic waves are labelled H, I, J, K, and the diastolic waves L, M, N, O (Fig. 1). The waves result from recoil from ventricular ejection causing the body to move footward, and from impact of the blood against a vessel wall or deceleration causing movement in the direction of the bloodstream.

In describing the normal ballistocardiogram and its physiology, it is convenient to divide the tracing into four components: (1) the individual waves, (2) amplitude, (3) pattern regularity, and (4) respiratory variation.

Waves.—H, the initial wave, occurs during the isometric period of ventricular contraction. It

is a headward wave resulting from the footward movement of the heart itself. Auricular systole may contribute to the H wave.

I, the second wave, is larger and footward in direction. It results from recoil during acceleration of the blood upward into the systemic and pulmonary arteries.

J is a large headward deflection. It is related to the impact of the blood against the aortic arch and pulmonary artery bifurcation and recoil from the footward flow of blood in the aorta.

K, the succeeding wave, is footward and results from the rapid deceleration of blood in the descending aorta and impact with small peripheral arteries.

L, M, N, and O are the remaining deflections occurring in diastole and may represent after vibrations. However, there is evidence that they may represent specific dynamic forces in the blood column as yet unexplained.

The H wave probably varies more in character than any other component in the HIJK pattern. It may be low, flat, or relatively large. Ordinarily the H wave is one-fourth or less of the J peak and may be about one half the size of the I valley. The I is normally almost always less than the J and greater than the H. The J is the most easily recognizable stroke, the highest peak, and is about four times as large as the H, and three times as large as the I stroke. The K stroke is usually sightly deeper than the I valley.

Amplitude.—The amplitude of the waves in the normal tracing may vary slightly. Using an electromagnetic pickup and direct writing electrocardiogram whose sensitivity is such that one millivolt causes a deflection of 1 cm., the I J amplitude is approximately 10 mm. in subjects of all ages.[13] The J K slope is normally equal to, or 2 mm. greater than the I J slope. The H I slope measures at least 4 mm. in amplitude.

Pattern.—Regularity of pattern is a prominent feature of the normal ballistocardiogram. This regularity is important, since irregularity is found in serious cardiac disease. The normal pattern is repetitive from beat to beat and definite in onset, varying only slightly in amplitude with respiration.

Respiratory Variation.—Respiration affects both the baseline of the record and the amplitude of the H I J K pattern. During inspiration the diaphragm moves down, enhancing footward and opposing headward impacts; the result is a downward shift of the baseline. In expiration the reverse occurs and the baseline shifts up. Respiration also affects the filling of the heart. In the inspiratory phase blood is literally sucked into the right ventricle, causing an increased right heart output in accordance with Starling's law. At the same time there is a decline in blood flowing through the left heart. During expiration there is less blood entering and leaving the right heart, while more blood enters the left side because of the squeezing action of pulmonary tissue on the pulmonary vascular bed. The right heart changes predominate throughout both phases of respiration, and hence are reflected in the ballistocardiogram. The I wave (produced by cardiac recoil) normally increases in size during inspiration due to increased right heart output and also because the heart assumes a more vertical position, making the footward component of cardiac recoil more pronounced. The J wave increases due to an increased total stroke volume during inspiration resulting from the predominant right heart changes in cardiac output. The I and J waves decrease in size with expiration for opposite reasons.

Eating, smoking, exercise, and body viscosity are also important factors which may alter the normal ballistocardiogram. The ingestion of food may increase the cardiac output by as much as two liters in normal persons.[9] This results in hyperkinemia, or unusually large complexes. Exercise also normally increases the cardiac output and produces hyperkinemia.

Whether changes on the ballistocardiogram following smoking can be considered normal physiological responses cannot be said. Caccese and Schrager studied thirty-one patients, twenty-three normals included, and found changes in eighteen following smoking.[3] The changes were usually transient, lasting one to twenty minutes and consisting mainly in increased respiratory variation. The exact mechanism whereby smoking causes changes in respiratory variation or distortion of complexes is not clear. It may be due to an effect on the vigor of systolic contraction since the changes resemble those seen frequently after myocardial infarction.[3] On the other hand, some believe that it is due largely to diminution of volume in the pulmonary pool.[5]

Body viscosity and tissue elasticity may alter the amplitude of the ballistocardiogram, but have

little influence on the configuration of pattern.[13] In cases where altered viscosity and tissue elasticity are suspected, a 100-gram weight may be allowed to tap the shoulder by swinging over a fixed distance and the resulting deflection compared to the amplitude of the tracing in question. This may effect a pattern of high amplitude in a patient whose ballistic pattern is of low amplitude, thus proving that the low amplitude is definitely abnormal.

There are certain technical limitations to ballistocardiographic records. A good tracing cannot be obtained in the following situations: (1) when the heart rate is excessively rapid, over 140, (2) when gross tremors or a considerable number of muscular tics are present, (3) when the individual is unco-operative and continually moves on the table, and (4) when there is great tachypnea.

Physiology of the Abnormal Ballistocardiogram

Abnormalities in a ballistocardiogram and their physiology may again be conveniently separated into four components: (1) changes in the individual waves, (2) changes in amplitude, (3) pattern irregularities, and (4) abnormal respiratory variation.

Waves.—Individual waves may be abnormal or the whole complex may show several abnormal waves. These abnormalities are as follows:

(1) Large H wave, or "early M" pattern. The H wave is markedly increased in amplitude, often reaching the height of the normal J wave. The pattern gives the appearance of the letter *M* in the early part of the systolic complex. The H wave is definitely related to auricular contraction, as is shown by the presence of H waves in complete heart block. On the other hand, records have been obtained with H waves in the presence of auricular fibrillation. Large H waves may be related to increased auricular contractions against resistance as may occur in hypertension, or may result from abnormal movement of blood within the heart as is sometimes seen in cardiac aneurysm.

(2) Abnormal I wave. The I wave is slurred, notched, rounded, or reduced in amplitude. The extreme abnormality is complete absence of the I wave. A distorted I wave occurs in abnormal or weakened ventricular systole.

(3) Abnormal J wave. The J wave is abnormal if it is slurred, notched, rounded, or reduced in amplitude. It normally dominates the entire tracing. When the J wave is notched it produces the "late M" pattern. In experiments with hearts at necropsy, notched J waves were produced by injecting the ventricles asynchronously.[23]

(4) Abnormal K waves. The K wave may be "cut off;" i. e., absent or markedly reduced in amplitude ending at or near the baseline. Since the K wave depends on forces resulting from deceleration of blood in the aorta, aortic afterfling, and impact on smaller vessels, it is "cut off" in conditions where these forces are interrupted, such as significant coarctation of the aorta and thrombosis of the abdominal aorta. An abnormal K wave is associated with the "late downstroke" pattern, as will be discussed shortly.

(5) Large diastolic waves. The systolic waves are low and the diastolic waves are high. These waves are encountered frequently in cases of elevated venous pressure.[23] There is an abnormally abrupt movement of blood as the heart is filled, creating waves which travel back into the great veins. Experimentally very large diastolic waves can be produced in constrictive pericarditis; these waves disappear after the constriction is removed. Starr presumes that the blood rushes into the heart with greater force because of the high venous pressure.[23] The filling stops abruptly in middiastole, though, because a constricted heart suddenly reaches its limit of possible expansion. The sudden halt causes waves to be transmitted back into the great veins, where because of high venous pressure they are propagated more strongly than under normal conditions and thus are more effective in producing abnormal diastolic waves. Large diastolic waves may be also seen in arterio-venous shunts, where high venous pressure forces blood into the heart in diastole with considerable impact.

(6) The deep K, "late downstroke" pattern consists of systolic waves of low amplitude with an unusually deep K wave. The downstroke of the K wave dominates the pattern. This complex is probably produced by a delay in maximum expulsion velocity until late in systole.

Amplitude.—Amplitude of an abnormal tracing may be unusually large, hyperkinemia, or unusually low, hypokinemia. In general, hyperkinemia is associated with various causes of high output. Since eating normally increases the cardiac output, it is preferable to take a ballistocardiogram at least two to three hours after eating, when near basal conditions can be approximated. Emo-

tional factors may also increase the cardiac output; hence it is wise to explain the procedure carefully to the patient. Hyperkinemia may be found in hyperthyroidism, patent ductus arteriosus, approximately one-fourth of anemia patients, beri beri, sometimes in hypertension with cardiac hypertrophy, late in febrile conditions, occasionally in neurocirculatory asthenia and chronic pulmonary disease, and frequently in aortic insufficiency. Hypokinemia is seen in myxedema, shock, heart failure of the low output type, hypothyroidism, panhypopituitarism, arteriosclerotic heart disease, and moribund patients. The hypokinemic I J waves produced by reduced ventricular ejection in congestive failure increase in response to proper cardiac therapy.

Pattern.—Irregular and bizarre patterns indicate serious impairment of ventricular function, such as occurs in infarction, congestive failure, pericarditis, and myocarditis.

Respiratory Variation.—Normally the I J waves are increased up to 50 per cent with deep inspiration. Abnormal respiratory variation is defined as marked phasic reduction in the maximal amplitude of systolic waves, exceeding 50 per cent. Often the waves, especially in expiration, may become unidentifiable or almost disappear. It has been shown that increased respiratory variation over 50 per cent is often associated with angina and hypertensive cardiovascular disease.[5] The first abnormalities in the waves may be noted in expiration: the weakening heart first contracts abnormally at the point in the respiratory cycle where it is most poorly filled. This early distortion of the smallest waves in expiration is an excellent example of Starling's Law of the Heart.

Abnormal ballistocardiogram tracings have been classified in two ways. The simplest method was proposed by Starr and Mayock: categorization is merely based on the percentage of abnormal complexes. This method is especially applicable when abnormalities occur only during different phases of respiration. The classification most widely accepted today is that of Brown, Hoffman, and deLalla.[1] Grade O is a normal tracing. Grade I represents records that demonstrate only unusual decrease in amplitude during expiration, often with loss of definitiveness. In Grade II tracings, half or more of the complexes are abnormal, mainly during expiration. A Grade III ballistocardiogram shows varying abnormalities throughout all phases of respiration, low amplitude, but still has individually recognizable complexes. Grade IV records have totally unrecognizable complexes.

Aging produces pronounced changes in the ballistocardiogram. As age advances the amplitude becomes smaller, and I and J waves diminish in size relative to the H and K even though health commensurate with age is maintained. To produce a deep I wave experimentally, the blood leaving the heart must be rapidly accelerated early in systole, and to do this requires power. A shallow I wave and a smaller J wave occur when there is little early acceleration of blood and to produce this less strength is required.[23] Thus as the heart grows older it lifts its load more slowly. To quote Starr: "By changing the manner of systolic ejection of blood so that acceleration is kept at a minimum, the load of the heart is lifted more slowly and by this means a heart lacking in strength can secure the greatest cardiac output possible for it and so perhaps maintain its cardiac output relatively unimpaired. This change in cardiac function, however, can be detected by change of form of the ballistocardiogram." Since this adaptation may permit the heart's pumping of blood to remain essentially unimpaired, there is seen a reasonable explanation for the observation that the ballistic record can detect myocardial abnormality very early in the course of disease and may detect it before the development of symptoms or any other clinical or laboratory evidence of myocardial dysfunction. It has also been shown that there is a progressive increase in respiratory variation with age; caution should be exercised in comparing the tracings of young normal subjects with middle aged patients.[1]

Clinical Study

In recent years much investigation has been devoted to defining the limits of clinical application for ballistocardiography. Only the passage of time will show if present day concepts are well founded. At present it appears that the ballistocardiogram finds its most value in coronary artery disease and hypertension, and is of definite importance in bundle branch block, congestive failure, and coarctation of the aorta. The ballistocardiogram may be of value in cor pulmonale, pericarditis, thyroid disease and disease of altered metabolism, and seems to have least application

in the field of congenital heart disease, excepting in coarctation. In our opinion the chief value of ballistocardiography today is in the diagnosis of angina and in the prognosis of cases of angina, normal ballistocardiograms. Five of the abnormals were in subjects over forty years of age. A twenty-three-year-old normal obese man, five feet, nine inches tall and weighing 205 pounds was found

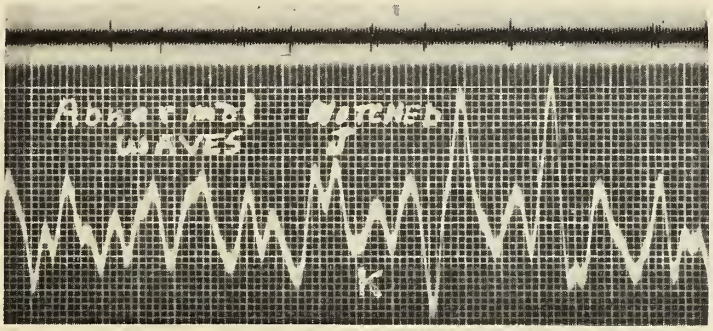


Fig. 2. Grade II ballistocardiogram obtained from an obese white man, aged twenty-three, apparently normal otherwise.

TABLE I. COMPARISON OF INCIDENCE OF ABNORMAL BALLISTOCARDIOGRAMS AND INCIDENCE OF ARTERIOSCLEROSIS IN SO-CALLED "NORMAL" PERSONS

	Authors	Total Cases	Age Under 40	Age 40-50	Age 50-60	Age Over 60
Per cent abnormal B C G's	Mandelbaum & Mandelbaum[14]	220	3%	22%	57%	75%
	Scarborough *et al*[20]	369*	0%	10%	30%	64-90%
Per cent showing arteriosclerosis	Gubner[10]	320*	18%	34%	67%	72%

*Percentages interpolated from graphs.

myocardial infarction, and bundle branch block. It also seems probable that the ballistocardiogram will have a definite role in predicting subclinical coronary artery disease in otherwise apparently healthy individuals.

Our clinical study includes ballistocardiograms from apparently healthy individuals and patients with all types of cardiac and pulmonary disease. Over 300 ballistocardiograms were obtained in a period of ten months with a modified Dock ballistocardiograph. These were taken in the post-absorptive state and after the patient had been resting about thirty minutes. A flat, stable table was used. Extraneous noises were eliminated as much as possible and the procedure was carefully explained to the patient in an attempt to avoid emotional factors. A one centimeter, one millivolt standardization was used. Phonocardiograms were taken simultaneously, since the first heart sound corresponds closely to the *H* wave and aids in identifying the waves.

Normal Group.—Ninety-two normal individuals according to clinical, x-ray and electrocardiographic findings were studied: eight showed abnormal ballistocardiograms. Five of the abnormals were in subjects over forty years of age. A twenty-three-year-old normal obese man, five feet, nine inches tall and weighing 205 pounds was found to show grade II changes on two occasions (Fig. 2). The abnormality is perhaps due to the strain imposed on the heart. It has been shown that abnormal ballistocardiograms in apparently normal, obese persons become normal after weight reduction.[7] On the other hand, the transient abnormal physiological pattern may become fixed in the course of time and impair the efficiency of the heart to the point of disease; such physiological impairment as evidenced by the ballistocardiogram may account for the increased cardiac mortality in obese individuals.

The finding of eight abnormal ballistocardiograms in the group is important, for these individuals may be harboring subclinical heart disease. Starr followed for eight to ten years ninety presumably normal persons, all over forty years, on whom he had obtained ballistocardiograms.[22] Of four with originally abnormal tracings, three developed coronary artery disease. Of six others with abnormally small records in proportion to body weight, all developed angina pectoris or suffered a myocardial infarction. Mandelbaum and Mandelbaum, and Scarborough and his group have shown that the percentage of abnormal ballisto-

cardiograms in apparently normal individuals rises steadily with advancing age to 64 to 75 per cent abnormality in patients over sixty years of age.[14,20] Gubner studied the incidence of arteriosclerosis in

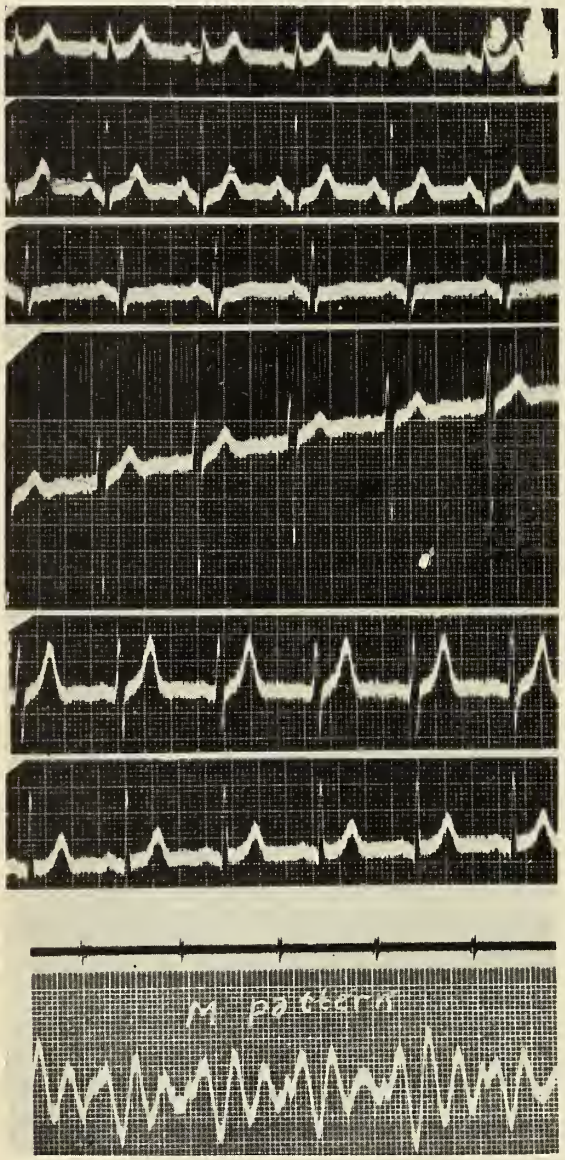


Fig. 3. White man, aged fifty-five, gives history of precordial pain on exertion and a sensation of smothering. Electrocardiogram before and after exercise is normal. Ballistocardiogram shows "late M" pattern seen in angina. Above—Leads I, II, III, V_2, V_4, and V_6. Below—Ballistocardiogram.

unselected, non-cardiac insurance applicants; he found a rise from eighteen per cent in persons under forty to 72 per cent in persons over sixty.[10] The presence of arteriosclerosis was judged by three criteria: (1) calcified plaques on x-ray, (2) major electrocardiogram abnormalities, and (3) reversal of pulsation along the left ventricular border in the roentgenkymogram. The findings of abnormal ballistocardiograms and incidence of arteriosclerosis in different age groups are summarized in Table I. A striking parallelism is noted in [illegible] der age groups; it appears in general that [illegible]osclerotic heart disease will be manifest on the ballistocardiogram even if no clinical symptoms are present. Thus the ballistocardiographic finding of cardiac dysfunction in a so-called normal individual has great implication: it means that the individual is more likely to develop clinical heart disease than if his tracing were normal, and adds significance to the appearance of minor or questionable cardiac symptoms.

Coronary Artery Disease.—In the absence of clear cut "coronary" or anginal history or positive physical findings, the diagnosis of angina pectoris may be quite difficult. Resting electrocardiogram is normal in 70 to 80 per cent of cases. The Master two-step test has greatly increased the number of positive electrocardiograms, and the anoxemia test, while helpful, has occasionally been found dangerous.

Twenty-two patients with clinical angina but with no history of infarction were studied. Varying degrees of abnormality were evident in nineteen; four had grade IV tracings. Figure 3 shows a typical case. During the ten month period of observation, three of the four with grade IV tracings developed myocardial infarction. The electrocardiogram was positive in only six of the whole group. A summary of the ballistocardiogram and electrocardiogram findings in angina as reported by various authors is shown in Table II.[1,4,14,20] All authors report at least 75 per cent abnormal resting ballistocardiograms, and the longest series shows 89 per cent abnormal resting ballistocardiograms. In all reports the number of abnormal resting ballistocardiograms was significantly higher than the number of abnormal resting electrocardiograms. Those with grade I abnormality had the best clinical course. Several authors have studied the use of abdominal supports for patients that show improvement in their tracing while wearing a support.[2,12] Brown's results are impressive: 92 per cent of his selected group showed definite symptomatic improvement and increased exercise tolerance. A binder reduces splanchnic pooling,

raises the venous return to the heart, and elevates the right atrial pressure.

All of twenty-five patients with previous myocardial infarction showed abnormal ballistocardiogram patterns, from grade I to IV. It is instructive to compare two of these patients. One was a thirty-four-year-old colored man with two previous infarctions. He died suddenly of another "coronary" six weeks after a grade IV, completely abnormal tracing was obtained (Fig. 4). The other case is that of a fifty-five-year-old patient who had his first "coronary" four years ago and suffers mild angina on exertion; his clinical course has been good. His tracing shows only a grade I abnormality (Fig. 5). Various authors have shown a direct correlation between the grade of abnormality and subsequent angina and infarctions.[4,14,20] The percentage of abnormal ballistocardiograms in clinical infarction is very close to that of abnormal electrocardiograms; however, the ballistocardiogram will show impairment earlier, as well as give some insight into the future course of the patient.

Three types of patterns are recognized in coronary artery disease: (1) "early M" pattern, (2) "late downstroke" pattern, and (3) "late M" pattern. Other abnormal variations from low I and J waves to completely bizarre patterns may be found. The importance of the ballistocardiogram in coronary artery disease thus lies in differentiating types of chest pain from angina pectoris, and in predicting the course of angina and infarction patients.

TABLE II. PERCENTAGE OF NORMAL BALLISTOCARDIOGRAMS AND ELECTROCARDIOGRAMS IN TYPICAL AND ATYPICAL CASES OF ANGINA

Investigators	Total Cases	Abnormal Resting BCG's	Abnormal Resting EKG's	Abnormal EKG's with Master 2-Step Test
Mandelbaum & Mandelbaum[14]	224	89%	77%	
Scarborough, *et al*[20]	191	75%	24%	57%
Brown, *et al*[1]	50	94%	48%	
Chesky, *et al*[4]	40*	75%	0%	100%

*Special select group with all positive Master one and two step tests.

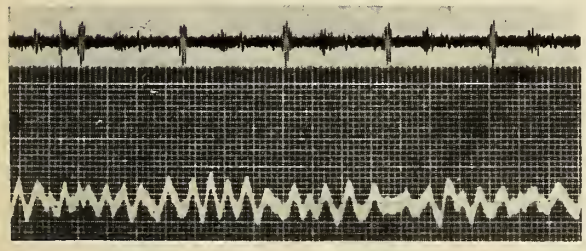


Fig. 4. A thirty-four-year-old colored man who had a history of two previous myocardial infarctions. Six weeks after above tracing was taken he died of an acute coronary occlusion. Grade IV ballistocardiogram.

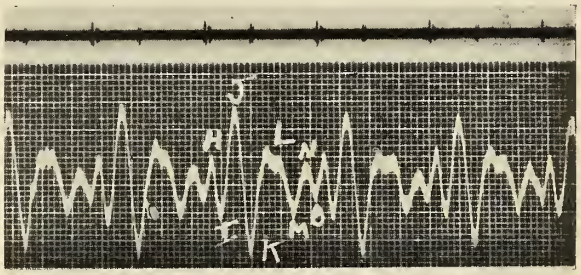


Fig. 5. White man, aged fifty-five, who has had two acute episodes of coronary occlusion proven by electrocardiograms in 1949 and 1951. At this time, 1953, his ballistocardiogram shows only Grade I changes. His clinical course has been benign.

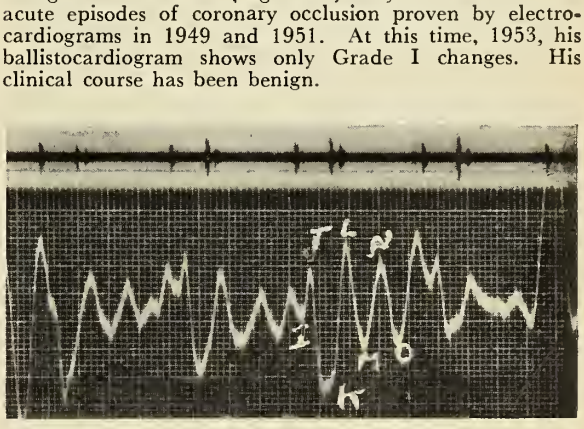


Fig. 6. A sixty-five-year-old colored woman who has had known hypertensive heart disease for one year. Blood pressure at time of tracing was 250/148. Tracing shows deep K, "late downstroke" pattern.

Hypertension.—A group of fifty-six patients with hypertension were studied: twenty-five of these showed signs of heart disease by other methods. Of the latter group, twenty-three showed abnormal tracings characterized by low I waves and deep K strokes (Fig. 6). Of the thirty-one remaining patients, seven showed minor changes (Fig. 7). Mandelbaum and Mandelbaum studied eighty advanced hypertensives with heart involvement and found characteristic changes in 86 per cent.[14] The

earliest change was a deep K stroke; as the hypertension developed, the amplitude of the H I J complex decreased and finally a few showed completely bizarre patterns. The amount of abnormality is

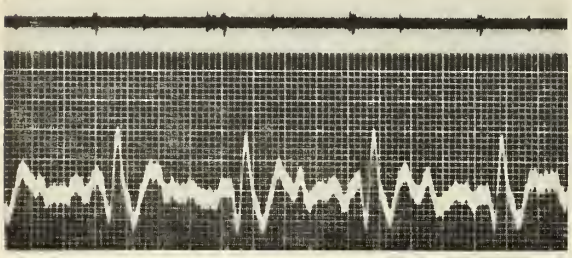


Fig. 7. A forty-two-year-old colored woman who gave a history of hypertension for two years. At the time of her ballistocardiogram her blood pressure was 240/130. There was no clinical evidence of heart disease. Tracing shows only a Grade I abnormality.

roughly proportional to the degree of cardiac involvement. Sympathectomy, Veratum, Hexamethonium and other methods known to decrease the high blood pressure have been shown to return the tracing towards normal. Some hypertensives are different in that they show ballistocardiograms with high amplitudes.[23] The injection of adrenalin subcutaneously in normal subjects produces identical records; hence it is possible that this type of hypertension is the result of increased adrenalin excretion, such as occurs in emotional states and pheochromocytoma. Since the ballistocardiogram is normal or shows only minimal changes in hypertension not involving the heart, the presence of hypertensive heart disease can be ascertained by characteristic changes in the ballistocardiogram.

Bundle Branch Block.—Many clinical studies in recent years have shown that the mortality in bundle branch block is less than previously accepted. Whereas it was formerly believed that the average survival with this condition was two years, recent studies show that patients with this finding may live for a considerably longer period, especially if they have right bundle branch block. The diagnosis of bundle branch block on the electrocardiogram does not tell whether there is extensive damage to heart muscle including the bundle, or whether only a small pin-point area of fibrosis has cut across the bundle. The electrocardiogram, then, is of no prognostic value. Clinical history and examination, chest x-ray, venous pressure and circulation times are helpful in special instances, but as a whole are deficient in determining the patient's future.

Of eight patients with left bundle branch block, three showed a moderately abnormal ballistocardiogram. The other five were normal or showed minor changes. One patient with abnormal tracing subsequently had a myocardial infarction and developed congestive heart failure. The five with minimal findings have had a good clinical course. Asynchronism of the conduction mechanism *per se* does not appreciably alter the ballistocardiogram, whereas the scarring and asymmetrical hypertrophy of the ventricle, producing asynchronous ejection, will produce a markedly abnormal tracing. Mandelbaum and Mandelbaum studied forty-six cases of bundle branch block that were ambulatory and comparatively well at the time of their tracing.[15] The cases with right bundle branch block showed better-looking ballistocardiograms than those with left bundle branch block, and the cases with the best clinical course showed the least abnormality. Their findings correspond clinically to the better prognosis attached to right bundle branch block. The authors make no sweeping conclusions since their follow-up period has been only twelve to twenty-four months. It can readily be seen, however, that a normal ballistocardiogram in the presence of bundle branch block in a subject over fifty years of age may be the only objective means of assuring the attending physician that the patient has a well functioning heart despite the electrocardiographic finding.

Paroxysmal Tachycardia.—Eleven persons with paroxysmal auricular tachycardia showed definite abnormality in their ballistocardiogram between episodes. Clinical history and examination, chest x-rays, and electrocardiogram were normal between attacks. A striking example is that of Mr. A. L., a white man, aged fifty-four. He had repeated episodes of marked palpitation for five years. In 1951, he was seen in the emergency room with a regular tachycardia of 200 and a blood pressure reading of 84/62, and the clinical picture of shock and great dyspnea. Treatment with quinidine returned the rate to normal and alleviated the symptoms. Physical examination, chest x-ray, and electrocardiogram have been normal repeatedly. The ballistocardiogram, however, shows grade III changes (Fig. 8), and is the only objective test in this patient that reflects the severe physiological

impairment in an otherwise apparently healthy heart. Lown, Ganong, and Levine have demonstrated shortened P-R intervals in twenty-three cases of paroxysmal tachycardia between attacks.[11]

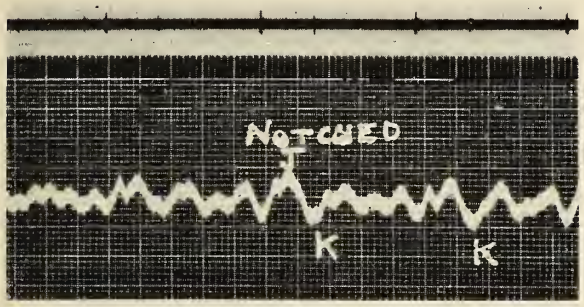


Fig. 8. A fifty-four-year-old white man who has had repeated episodes of palpitation for four years which have been proved to be due to paroxysmal auricular tachycardia. At the time of the tracing the electrocardiogram was essentially normal. Grade III ballistocardiogram.

Although current teaching is that paroxysmal auricular tachycardia is a benign condition, it appears that the heart is physiologically, if not anatomatically, abnormal as evidenced by the ballistocardiogram. This physiological aberration, in our opinion, may be just as important symptomatically and prognostically as an organic finding.

Coarctation.—Three cases of coarctation of the aorta were studied; all showed the pathognomonic "cut off" K wave (Fig. 9). Nickerson has shown the return of the K wave to normal following surgery.[19] Thrombosis of the descending aorta produces similar "cut off" K wave and similar return to normal following surgical correction.[16] Although the ballistocardiogram is usually not indicated for the diagnosis of coarctation, it may be the first clue to the condition in the work-up of a hypertensive patient by showing the typical "cut off" K wave.

Rheumatic Heart Disease.—Twenty cases of rheumatic heart disease were observed. Except in aortic insufficiency where very high amplitude occurred in eight out of eight cases, no characteristic changes were found. One case of rheumatic carditis showed decreased amplitude of waves and slurring of the J wave; these changes regressed and the amplitude returned to normal after therapy. Rheumatic hearts in failure show increase in amplitude of their I J strokes following adequate digitalization. Intracardiac flow of blood does not appreciably influence the ballistocardiogram; hence mitral lesions produce little change in the tracing.[17]

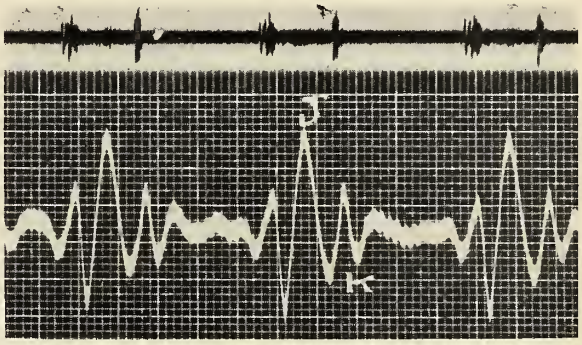


Fig. 9. A fifty-year-old white woman who had a proven coarctation of the aorta. Blood pressure in the upper extremity is 200/100; in the lower extremity, 150/80. X-ray shows typical notching of the ribs. Her ballistocardiogram shows typical "cut off" K wave.

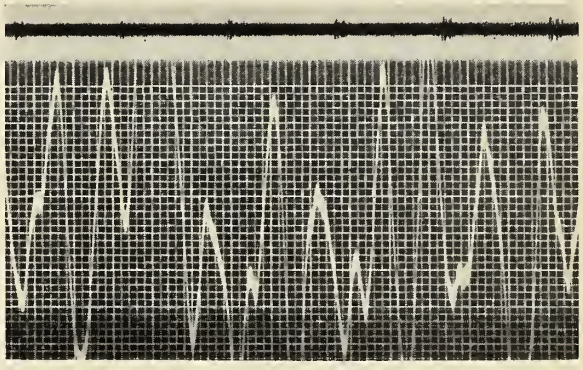


Fig. 10. A forty-six-year-old white man complained of nervousness, palpitation, increased appetite, and marked weight loss. Basal metabolism rate at time of tracing was +34. Radioactive iodine tracer studies showed intrinsic hyperactive function of the toxic type.

Hyperthyroidism.—Thirty cases of proven hyperthyroidism were studied; twenty-six of these showed varying degrees of high amplitude waves (Fig. 10). The large J K strokes are constant and are caused by increased cardiac output; these large strokes are closely related to basal metabolism, radioactive tracer, and blood protein bound iodine studies. Occasionally there is broadening of the J stroke in hyperthyroidism. When this does not disappear following control of the condition, underlying heart disease should be suspected.

Hypothyroidism.—Fifteen cases of varying degrees of hypothyroidism, ranging to myxedema,

were also observed. These cases were confirmed by radioactive iodine studies. The amplitude of the waves was low in fourteen of these cases; however, ballistocardiogram findings were not characteristic.

Pulmonary Disease.—Eleven cases of severe pulmonary disease were observed. These include two cases of cor pulmonale. In one the abnormality was a Grade I tracing while in the other the pattern was completely abnormal, showing indistinguishable waves and increased respiratory variation. Frankel and Rathermich have obtained records on a large series of patients with chronic cor pulmonale.[8] They found marked abnormalities with broadened strokes, low I waves, but no constant changes. The main feature was a marked variation of complexes with respiration. It has been concluded that this is on the basis of decreased pulmonary blood pool in chronic pulmonary disease.[5] Respiratory change in the intrapleural pressure is more marked; there is more negative pressure with inspiration, and more positive pressure in expiration. This may be largely responsible for the increased respiratory variation of the I J stroke.

Congenital Heart Disease.—Ten of our cases were patients with congenital heart disease. A few minor abnormalities were noted, but nothing diagnostic. Very deep H I and I J strokes have been described in pulmonary stenosis.[8] In interventricular septal defect, broadening of the J peak with a plateau-like effect of the initial portion of the J K slope and very high L waves have been described.[8] These findings, however, are not specific, and we believe that except in coarctation the ballistocardiogram at present is of little value in congenital heart disease.

Other Conditions.—Ballistocardiograms were obtained in a group of miscellaneous conditions. Congestive failure is almost always accompanied by hypokinemia and configuration distortions; normal or high amplitude immediately suggests high output failure. The differentiation of high output failure is extremely important, since successful treatment of the underlying condition will often effect a permanent cure of the cardiac insufficiency. In aortic insufficiency large JK strokes are found, due to increased cardiac output. In constrictive pericarditis there are reduced cardiac output and low I J waves which improve following surgery.[21]

Discussion

The question is often raised as to whether the ballistocardiogram is better than the electrocardiogram and vice versa. Actually while the two roughly correlate in indicating pathology, they are entirely different. One measures electrical forces; the other measures mechanical forces and is more closely related to the efficiency of the heart action as a pump.

In evaluating the clinical use of ballistocardiography it can be said that at last we have a method which may help the clinician to better prognosticate and treat his patients. Some of the skilled clinicians in the past were able to judge strength of the heart by feeling the pulse. The abrupt pressure change which was detected as a strong pulse has its genesis in the rapid acceleration of the blood by the heart, and the more gradual change characteristic of a slow pulse has its origin in a slower acceleration of blood. This was, in reality, a crude ballistic impulse, one which could be altered, though, by many peripheral factors.

Conclusions

In conclusion, the main indications for the clinical use of ballistocardiography can be outlined as follows:

(1) In the diagnosis of angina pectoris and the prognosis of coronary artery disease;

(2) In discovering subclinical heart disease in apparently normal individuals;

(3) In differentiating uncomplicated hypertension from hypertensive heart disease;

(4) In the prognosis of bundle branch block;

(5) In confirming the diagnosis of coarctation of the aorta, and

(6) In distinguishing high from low output heart failure and following the response to treatment.

Summary

(1) The physiology of the normal and abnormal ballistocardiogram has been discussed.

(2) Routine ballistocardiographic studies were made on over 300 patients and were found in general agreement with results of other workers.

(3) Eleven patients with paroxysmal auricular

tachycardia, apparently normal by all known tests, showed abnormal physiological mechanisms of the heart between episodes as evidenced by the ballistocardiogram.

(4) The indications for the clinical use of ballistocardiography were outlined.

Addendum

Since this article was written, we have recorded an additional 350 ballistocardiograms. They have shown similar findings. Additional studies on the relation of the thyroid and the heart by the ballistocardiogram, and the prognostic features of the ballistocardiogram in "coronary heart disease" are in progress and are being tabulated for future manuscripts.

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FREE MEDICAL CARE FOR U. S. PERSONNEL

As an outgrowth of a budget dispute over the free care of merchant seamen in Public Health Service hospitals, a study is being made to determine what it costs PHS each year to care for patients turned over to it by other government departments. The issue arose after the Budget Bureau told the Department of Health, Education, and Welfare to prepare its next budget excluding the care of merchant seamen, which has been considered a federal responsibility for about 150 years.

Secretary Hobby informed the Bureau she would comply, but that she would also have to determine the costs to PHS of caring for thousands of other patients for whom the federal government has assumed responsibility. She added that the review will consider, among other things, whether her department should not be reimbursed by the other federal departments for this hospital care.

Mrs. Hobby noted that the Treasury Department's Coast Guard personnel also are treated free in PHS marine hospitals, as are employe compensation cases of all departments under a program handled by the Labor Department. Because merchant seamen make up about 40 per cent of all cases in the sixteen marine hospitals, PHS plans to close up all these hospitals if it is denied funds to care for the sailors. *This would require the government to make other arrangements for the care of hospital and dispensary patients from other government departments, who average about 10,000 per day. Where the seamen would receive care probably would be determined by the unions and the shipping lines.*

Headaches Due to Tonsils and Adenoids

By Joseph K. Heckert, M.D.
Lansing, Michigan

IN 1929 while studying in Berlin, Professor Max Halle informed me that, in his estimation, the most important things a physician can know is that the headache often described as a "pressure" headache, originating in the back of the neck and progressing up over the head and reaching the supra-orbital region is almost invariably due to septic tonsils, tonsillar and adenoid tags, or infected granulations in the tonsillar region.

Since this time I have had the satisfaction of operating on a great many such cases with remarkable results. The method actually cures such headaches—it is not a therapeutic measure designed to give temporary relief but a permanent cure.

About twenty-five years ago it was believed that most headaches were due to sinusitis, now we know that sinusitis is relatively very seldom the cause of headache. Today it seems that physicians classify most headaches as functional or psychogenic. This is a diagnosis used as a last resort when no other etiological factors are found.

On the basis of my experience, I cannot go along with this concept. Rather, I believe these headaches originate as a result of the presence of septic tonsillar or granulation tissue. When a patient comes to my office with the complaint of a headache beginning in the back of the neck and running up over the head to the supra-orbital region, it is gratifying to feel that we can probably cure the patient by removing the tonsils and adenoids, tonsillar tags, or infected granulation tissue in the tonsillar area.

It is important in female patients with such headaches to determine if they have had bilateral removal of the ovaries since this is the most important cause other than septic tonsillar or granulation tissue.

Almost any factor disrupting the normal physiology of the individual may serve as a "trigger" to elicit one of these headaches which may last from a few hours to months at a time. For instance, such things as acute coryza, emotional upset, constipation, or infection any where in the body may initiate these headaches; *but without the presence of infection in the tonsillar or adenoid region these severe headaches would not occur!*

The most grateful patients are those who come to you after having sought relief from many sources, even from some of the outstanding clinics in the United States. They have been given the final diagnosis of functional headache.

After a thorough inquiry and examination, with no other demonstrable cause, and a failure to obtain relief through medication, it is safe to assume that the patient has infected tissue in the region of the palatine or pharyngeal tonsils.

The problem is to find this infected tissue. Occasionally the tissue is not demonstrable unless examination is done with the aid of a general anesthesia. To find a buried tag in the upper pole it is often necessary to gag the patient. In the lower pole under anesthesia, use a hook and rotate. Almost invariably such tissue can be demonstrated and removed with results being almost 100 per cent confirmative of the diagnosis.

It has been my purpose herein to draw attention to a causative agent in headache of the type described, and to reveal the remarkable results I have experienced in the treatment of such headaches.

1105 Bank of Lansing Building

ARMED FORCES IN SIXTY-THREE COUNTRIES

New Year's Day will find the members of our American armed forces serving in sixty-three different lands outside the continental United States. They are: Alaska, Aleutian Islands, Australia, Austria, the Azores, Belgium, Bermuda, Bolivia, Brazil, Canada, Colombia, Cuba, Denmark, Egypt, El Salvador, England, Eritrea, Formosa, France, Germany, Greece, Greenland, Guam, Hawaii, Honduras, Iceland, India, Indo-China, Indonesia, Iran, Israel, Italy, Iwo Jima, Japan, Korea, Kwajalein, Liberia, Libya, Malaya, Midway Islands, Morocco, Netherlands, New Zealand, Norway, Okinawa, Pakistan, Panama, Paraguay, Peru, Philippines, Portugal, Puerto Rico, Saipan, Saudi Arabia, Spain, Thailand, Trieste, Trinidad, Turkey, Venezuela, Virgin Islands, Wake Island, and Yugoslavia.—Clarence J. Brown, Member of Congress, Ohio, *Newsletter*, December 29, 1953.

Anaphylactoid Reaction Following Use of a Penicillin Lozenge

By H. E. Madalin, M.D.
Detroit, Michigan

THE LITERATURE abounds with case reports of various types of penicillin sensitivity and recently a fatal allergic reaction to an injection of crystalline penicillin G,[1] but to date there have been no reports of anaphylactoid reactions due to the ingestion of the small amounts of penicillin contained in lozenges.

The following describes such a case, which was verified by skin sensitivity study.

Report of Case

Case 1.—J. G., a thirty-eight-year-old white woman was admitted to the emergency room of Mt. Carmel Mercy Hospital shortly after she had taken a "Pondet" (Wyeth). This is a lozenge, the ingredients of which are listed by the manufacturer as: 20,000 units crystalline potassium penicillin G, and 50 units of Bacitracin in a candy base. The patient had had an upper respiratory infection for a week, and a friend of hers at work advised the medication, giving her one. After having had it in her mouth only one or two minutes, she spit out the lozenge due to a peculiar taste, "something like ammonia." She then went to the rest room, where she proceeded to vomit, and shortly afterward became unconscious.

On admission to the hospital, her blood pressure and pulse were unobtainable. Her sensorium was depressed and she was moaning. Her pupils at this time did not react to light or accommodation; her skin was cold and clammy; her temperature was 95.0° orally; her respiratory rate was 25; her heart sounds could not be heard; and the examiner thought her upper extremities were slightly spastic.

She was given intravenous fluids immediately—a total of 2,000 cc. 5 per cent glucose in water being given. Nasal oxygen was also started. She responded well to therapy and, within two hours, her pulse was found to be 108 and her blood pressure was 90/65. The next day the patient was feeling well subjectively with the exception of the cough she had had for a week previously.

Laboratory work on admission revealed a 4 plus glucosuria (done after intravenous fluids had been started) and a 1 plus proteinuria. The next day, her urine was normal. Her blood showed a hemoglobin of 13.6 gm.; white blood cell count of 11,300; differential—65 polymorphonuclears, 8 nonsegmented forms, 17 lymphocytes, 5 monocytes, and 5 eosinophiles. Her chest x-ray was normal.

Her past history, as obtained later, revealed that she had been treated six to seven years previously for pneumonia, presumably with some sulfa preparation; five years previously, she had been treated with penicillin injections twice a week for one month for a "pelvic infection." One year ago, she had three injections, which were thought to have been penicillin, for "flu." Three weeks prior to admission, she had an injection of what was probably a combination of penicillin and another antibiotic and this was followed immediately by a pruritus of her hands, feet, and face, lasting approximately five minutes.

She has no history of any other drug reaction or allergy, other than a contact dermatitis she vaguely recalls she once had.

The patient was tested with intradermal injections two days after admission. The substances used in testing were:

(1) A sterile water solution of a "Pondet"—the amount of material injected calculated to contain 50 units of penicillin G as well as ⅛ unit bacitracin.

(2) The same solution as (1), but incubated forty-five minutes with penicillinase (100 units/1500 units penicillin).

(3) Penicillinase—5 units (the same amount as in (2)).

(4) Crystalline potassium penicillin G—50 units.

(5) Bacitracin—⅛ unit.

(6) Sterile water.

The material was injected into the left arm, and within seven minutes, the patient had large wheals with pseudopods at the sites of (1) and (4), the former being slightly the larger of the two. There was *no* reaction at the site of any other injection, including the "Pondet" solution plus penicillinase.

At the time the skin manifestations became prominent, the patient felt subjectively the same as when she had taken the lozenge—including the same taste sensation ("like ammonia"). She also had a severe paroxysm of coughing at this time, which could probably be interpreted as bronchospasm. Her blood pressure went from 140/70 to 170/90 and her pulse went from 88 to 120. At this time a turniquet was put on her arm above the sites of the injections, and a total of 2.0 cc. of 1:1,000 epinephrine was given subcutaneously in 0.2 cc. amounts at various sites at about two minute intervals. She responded to this well—her coughing cleared up; her blood pressure went down to 140/68 and her pulse slowed to 96. She felt subjectively well again within twenty minutes.

Comment

The patient in this case was shown rather clearly to be sensitive to crystalline penicillin G in minute quantities. She had had an adequate previous history of penicillin intake to produce a sensitivity to subsequent administration of the drug. The sensitivity in this case was so great that the patient went into anaphylactoid shock with the oral ingestion of probably as little as 2,000 units (0.5 per cent of the usual intramuscular dose). A dosage total of 100 units as used in intradermal testing was ade-

(Continued on Page 91)

Massive Hemorrhage from Benign Adenoma of the Biliary Duct Causing Death

By Lloyd F. Teter, M.D.
Battle Creek, Michigan

THE EXTRA hepatic biliary ducts[1] are rarely the site of benign neoplasms and have received little attention in the current medical and surgical literature. Because of their location these seemingly harmless new growths can become serious lesions and may cause all the obstructing biliary symptoms with liver damage that cancer or extrahepatic calculi can produce. Adenoma and polypoid lesions can result in massive hemorrhage which may result in death, as shown in the case presented. These tumors usually retain their benign characteristics and tend to remain dormant for long periods of time. They are amenable to surgery and render a favorable prognosis when removed.

That benign neoplasms of the biliary duct are rare, is attested by the fact that Rolleston and McNee[5] succeeded in collecting only ten cases from the world literature in 1929. Marshall[4] reported only four cases of benign biliary duct new growths in a twenty-year period ending January, 1930, at the Mayo Clinic. Christopher,[2] in 1933, presented forty-one cases from the world literature. In the past nineteen years eight additional cases have been reported, including one described by Dr. Philip D. Chu[3] in his excellent article in the Archives of Pathology, July, 1950. The case here reported makes a total of fifty cases up to the present time.

Clinical Symptoms

Patients with benign neoplasm of the biliary duct present vague and variable symptoms. These tumors have a tendency to remain dormant for a long period of time. Some of the more common symptoms are repeated attacks of vague epigastric pain, indigestion, flatulence, mild jaundice, sudden unexplained gastric or bowel hemorrhage, nausea with episodes of vomiting, and sometimes acute colicky pain localized in the right hypochondrium. The duration of symptoms varies from several weeks to several years. Our patient, for example, had symptoms for thirty-five years.

Eventually these patients present symptoms of biliary obstruction. The early manifestations of obstruction may be slow and consist of vague epigastric distress with progressive jaundice. The onset, however, may be acute with a sense of epigastric pain, nausea, with or without vomiting, and deep jaundice. The patient finally develops severe pain, nausea and vomiting, deep progressive jaundice, with clay-colored stools, pruritus and dark urine. All these symptoms described are not characteristic and may be found in cholecystitis and cholelithiasis, or malignancy of the common bile duct, gall bladder, pancreas or duodenum. Physical findings are vague and nonspecific, and may consist of tenderness in the region of the liver, with or without liver enlargement. A mass sometimes can be palpated in the region of the gall bladder, accompanied by a varied degree of icterus. We also include massive hemorrhage from the biliary tract which may manifest itself as a gastric or profuse bowel or rectal hemorrhage.

Case Report

Case 1.—Mrs. C. A., a sixty-nine-year-old woman, had had intermittent gall-bladder attacks for at least thirty-five years, or as long as her daughter could remember. They had caused her to be chronically ill. Thanksgiving, 1951, she noticed some evidence of jaundice and her gall bladder was removed in the hospital of her home town on January 11, 1952. A common duct stone was suspected but was not identified at surgery. Her nausea and vomiting continued postoperatively and an x-ray showed that common duct stone was present. An exploratory operation also at her home hospital on March 24, 1952, was unsuccessful in obtaining the stone. A T-tube was left in place and the patient developed a biliary fistula. She had a forty-pound weight loss between October and the time of her admission to Leila Hospital on April 21, 1952.

Her admission laboratory studies showed a red blood count 3.46; white count, 6,000 with 66 per cent polymorphonuclears; urine not remarkable. Kahn was negative. Potassium, 21.6; CO_2, 56; A-G ratio, 3.6 to 3.7; NPN, 24 per cent; the thymol turbidity was 3.5; chlorides, 77.9 (reported as milliequivalent of sodium chloride: normal range 75-80). Prothrombin time was 38.5 per cent; cephaline flocculation negative in twenty-four hours; trace in forty-eight hours.

Cholangiograms were taken on April 21, 1952. These showed the T-tube in place and the distal duct dilated proximal to a stone located near the ampulla and 1 cm. in diameter. The stump of the cystic duct was also present, dilated and communicated with the T-tube. Very little opaque media entered the duodenum. At the time

Case report from the surgical service of R. L. Mustard, M.D. From the Department of Surgery, Leila Y. Post Montgomery Hospital, Battle Creek, Michigan.

of surgery on April 22, 1952, the old T-tube was found imbedded in a mass of scar tissue. An opening was found in the common bile duct with free bile draining into the abdominal cavity. Exploration of the common duct revealed a large stone imbedded near the ampulla of Vater. The stone was removed and a new T-tube was inserted in the opening of the common duct which then was closed in the usual manner. The patent cystic duct was closed. The liver appeared fairly normal. The abdomen revealed many adhesions present due to bile peritonitis. Repeated cholangiograms on May 5, 1952, revealed the T-tube to be present in the common bile duct. The hepatic duct and common duct were still somewhat dilated. There was nothing suggestive of calculi in the biliary tree at that time. The opaque media passed easily into the duodenum and there was a reflux of dye into the pancreatic duct.

Due to the biliary fistula the first postoperative problem she presented was that of acid base balance, both chlorides and potassium varying somewhat from the normal but were being returned to normal with proper therapy. There was some problem of reaction to transfusions, of which she had had twenty pints, so that she was given cells washed with saline during part of her hospital course. After having shown fair recovery and being partially ambulated on May 9, 1952, she began to bleed from the mouth and from the bile fistula. Her temperature rose to 103° and she continued to hemorrhage intermittently until she expired on May 18, 1952. Reported prothrombin times were never lower than 37 per cent.

Pertinent Necropsy Findings: The liver weighed approximately 1600 grams and showed a nutmeg pattern with some evidence of jaundice. Dissection of the bile ducts and fistula showed that the fistulous tract measured 1.5 cm. in diameter and appeared to communicate directly with the right and left hepatic duct and the common duct, all of which were dilated to at least 1 or 2 cm. in diameter, and filled with gross blood. Inserted in the lumen of one of the smaller branches of a left hepatic duct was a papillomatous nodular structure which was firmly adherent to the wall and showed marked congestion. Microscopic section disclosed this growth to be a benign adenomatous polyp with an eroded tip.

Comment

This sixty-nine-year-old white woman gave symptoms of gall-bladder disease for thirty-five years. Her symptoms were pain, nausea, vomiting, but no apparent jaundice until November, 1951. During her stay at Leila Hospital she had an attack of sudden unexplained persistent nausea followed by projectile vomiting. Her nurses commented on the fact that she would awake suddenly from a deep sleep, belch and vomit. She was described as a chronic "erpy" type of patient. Her hemorrhage, which was very profuse, came as a thunderbolt out of the blue just as she was about to be discharged from the hospital. Prothrombinopenia was considered as the cause of her bleeding at first, due to the constant loss of bile through the T-tube. Her prothrombin time never dropped below 37 per cent during her stay in the hospital. Autopsy finding of bleeding traced to erosion of an adenoma of the biliary duct was a surprising entity. Casual search through literature revealed no other such complication.

Summary

Benign neoplasms of the extrahepatic ducts are rare. All authors are unanimous in the opinion that a correct clinical diagnosis is very difficult and probably impossible to make. Because of the extreme rarity one is hesitant to attempt to make such a diagnosis. The possibility of biliary neoplasm should be kept in mind, in all cases of unexplained icterus or gastrointestinal hemorrhage. Adenoma of the biliary duct is often associated with cadculi in the bile ducts, or gall bladder. Because these lesions tend to remain dormant for long periods of time, early operative removal should be attended by a favorable prognosis. Of eleven of the thirty cases reviewed by Chu, there was successful excision of the tumors with recovery. We might add that in none of the cases recorded, was the correct diagnosis made, preoperatively or ante mortem.

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DID YOU KNOW?

That from 1496 B.C. to 1861 A.D., the world had only 227 years of peace and 3130 years of war?

That during four centuries from 1450 to 1850, Austria was at war 234 years; England 198 years; France 192 years; Spain 271 years and Russia 250 years?

That since the adoption of our Constitution 150 years ago, we have been at war only twelve years?

Inter-Relationship of Organized Medicine and Organized Public Health

By Winston B. Prothro, M.D., M.P.H.,
Grand Rapids, Michigan

AS A MEMBER of both the APHA and the AMA, I have long been interested in the relationship between organized medicine and organized public health; and in the relationship between the individuals in each profession. I have always considered myself as practicing the profession of medicine, devoting myself solely to the specialty of public health.

The history of the development of the public health movement in this community shows clearly that physicians, singly or in groups, have been largely responsible for the establishment and support of health departments. It is also axiomatic that strong health departments exist where local physicians provide interest and support. Conversely, weak or no health departments are found where local physicians are disinterested. Good public health departments can remain progressive and alert to community needs, or be blocked and frustrated, depending upon the attitude of the physicians in the community. A health department can not be operated successfully without the willing and co-operative services of physicians. This probably stems from the fact that the public health profession and the medical profession are primarily interested in the health of the public.

I am appreciative of this opportunity of speaking to the Kent County Medical Society so soon after my acceptance of the position of Director of the Grand Rapids City Health Department, because I am convinced that the basic reason public health programs are ineffective in some localities is the lack of understanding and co-operation between organized medicine and organized public health, and where this exists it places both public health and medicine in apparent conflict before the tribunal of public opinion and tends to discredit both. Where there is an understanding of the responsibilities and objectives of public health, there is usually excellent relationship between private physicians and the health department and they supplement each other without conflict to the best interest of all concerned.

Perhaps, then, it is wise to halt here and see if we can agree on definitions and on the responsibilities and objectives of government in the area of health. Would you accept with me the definition of the World Health Organization in defining health as a "state of complete physical, mental, and social well being, and not merely the absence of disease or infirmity;" and Dr. C. A. Winslow's definition of public health as "the science and art of preventing diseases, prolonging life, and promoting physical and mental health and efficiency through organized community efforts for the sanitation of the enviroment, the control of communicable diseases, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and treatment of diseases, and the development of the social machinery which will insure to every individual in the community a standard of living adequate for the maintenance of health."

I agree with President Lincoln when he said "the role of Government is to do for a community of people what they need to have done, but cannot do at all, or cannot so well do for themselves in their separate and individual capacities. All that the people can individually do as well for themselves, Government ought not interfere."

A governmental body is responsible for providing such protective measures and facilities as it reasonably can to protect its citizens. It is responsible for an intelligent planned program designed to prevent preventable diseases—prevent the disease itself if possible, prevent the seriousness when it does occur, prevent the spread of disease to others, and prevent unnecessary deaths.

The duties and functions of any health department are determined by the community's needs and demands, its financial support, the health ordinances and laws it has to work with, and by the authority and confidence invested in it by the governmental body creating it.

Your City Health Department, like most health departments, is staffed by trained public health personnel of many disciplines; i. e., physicians, dentists, nurses, veterinarian, engineer, sanitarian, educator, laboratory technician, and clerical helpers. These personnel are organized into the follow-

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ing divisions: administrative and vital statistics, clinic services, nursing, health education, dental health, environmental health, and industrial health.

How does the Health Department function? All the vital statistics, births, deaths, cases of communicable diseases, etc., are reported to the department. These are analyzed and studied by professional personnel as to the kinds and types of diseases, their geographical location; and according to age, sex, and race. A definite program is developed to control or prevent from further spreading every major communicable and occupational disease reported.

One of the recognized basic public health programs is in the area of maternal and child health. In Grand Rapids much of this work is done by the local hospitals and the Community Health Service. Most of the health department's medical and nursing time is spent in other phases of public health. Their efforts are directed primarily towards the prevention of diseases, the detection of diseases and physical defects, and in developing the greatest possible degree of public health. This is done through epidemiological studies, home visits, clinics, school health services, group work, and health education. The local health department operates immunization, tuberculosis, and venereal disease clinics. It also conducts audiometer and Massachusetts vision screening tests in the schools. A limited number of physical examinations are made on school children for educational purposes and the detection of other types of physical handicaps. It also provides dental health education, makes examinations and referrals and provides dental care for the children of medically indigent persons.

The health department, primarily through its division of environmental health, is responsible for enforcing all local and state public health ordinances, rules, regulations, and laws. It is responsible for all phases of environmental sanitation. It inspects and maintains set sanitary standards for food and milk handling establishments, dairies, pasteurizing plants, slaughter pens, and butcher shops, schools and public buildings, substandard houses, tourist camps, day nurseries, hotels, nursing and convalescent homes, maternity hospitals, et cetera. It is responsible for plumbing inspection and the control of flies, rats, roaches, and other vermin; and for the correction of public health nuisances.

The division of Industrial Health is primarily concerned with the prevention of occupational diseases and industrial illness. This has become an important part of public health activities. Its activities are to find factors or conditions in the working places that may cause or contribute to the illness or serious discomforts of employes; and of devising methods and means of eliminating or controlling such conditions.

The health education phases of the public health program is designed to reach the entire community. There are many diseases which medical science knows how to prevent or control. This knowledge is of no value unless it is passed on to all the people. If there were no official spokesman, this information would not be disseminated and people would die of ignorance. It is the responsibility of the public health department to keep the public informed of health dangers, how diseases can be prevented or controlled, and to help them take needed precautions whether it is to take immunization, health examinations for tuberculosis, cancer, et cetera, correct an insanitary health hazard, or eliminate vermin.

Many "quack" doctors advertise, and many worthless drugs and other preparations are highly advertised to the unsuspecting public. The ethical medical practitioner does not advertise. Only a medical health official, representing an official agency, can answer the fraudulent advertising and see that the public is given scientific medical information it can depend upon.

Dr. W. P. Shepard, Past President of APHA, spoke my thoughts when he said "the dividing point between public health and the private practice of medicine is that point at which a health problem in a given community is of sufficient interest to a sufficient number of citizens so that some type of community organization is required to solve it. Obviously no single individual or physician can provide a city with a pure water supply nor proper waste disposal. These are community chores. All the doctors together cannot bring about small pox and diphtheria immunization of 85 per cent of the child population; though the doctors can be of great help. It requires community organization best led by the health officer. In most instances the practicing physicians of a community are among the first to recognize these problems and are in the fore-front of the community organization designed to seek a solution.

There are many who contribute to the overall health field; for example, research workers, drug manufacturers, druggists, general practitioners, various medical specialists, pathologists, bacteriolo-

gists, laboratory technicians, nurses, dentists, et cetera. If we should use a military example and terms to describe the place of public health in the overall health force, logically it would be described as the Air Force. Its main duty is to carry the offensive to the enemy. If we had been content during the last war to merely salvage all we could each time after the enemy had dropped bombs on our cities, we could never have won the war. The military leaders considered that the best defense was a good offense. The Air Force was assigned the responsibility of eliminating the source of our enemy's war potential. It was this offensive, or preventive action, that contributed most to our victory. Using this example, public health has the responsibility of carrying the attack to the enemy and destroying or eliminating the source of infections, or of disrupting its communication system; i. e., its method of spread. The private physician might be called the home guard. Both the Air Force and the Home Guard play an important part in the war effort. They work together as supplements, but do not overlap. Both are essential to a good defense force.

Previously I said that the work of the health department supplements rather than duplicates or competes with the private physician. Let me illustrate: When a private physician reports a major communicable or occupational disease, a trained public health worker makes an epidemiological investigation and establishes isolation or quarantine as indicated. The family physician who reports the case continues to treat the patient as this is not a public health function. His efforts are supplemented by the health officer in a way that no other person or agency can. For example, suppose the reported disease was syphilis. The family physician may treat the case. However, we know that every infection is contracted from someone, and possibly has been spread to another person. The family physician can do little or nothing about locating and treating the person who first spread the disease other than the familial contacts; so, he or she continues to spread it. By authority, and under the supervision, of the health officer, a person trained in medicine and social work, interviews the patient in regards to his or her sex contacts. Each of these are contacted and examinations made. All new cases of syphilis found are referred to the physician of their choice for treatment. Thus the source of continued spread of the disease is stopped. Only a representative of an official agency can intervene in such cases and thus eliminate the constant hazard to the health of every person in the community.

Take another example: Suppose the reported case is dysentery, typhoid fever, or one or other "filth borne" diseases, again the family physician reports and treats the case, but there his efforts stop. It is not known whether the disease resulted from spoiled or contaminated food, milk, or water; whether the open toilet next door, which is swarming with flies, is the original source of infection, or if it is a typhoid carrier that works in the cafe down the street. Here again the public health authorities are called in to supplement the work of the private physician. A public health worker investigates all possible sources and eliminates or sets up such protective measures as are needed to prevent any other person from getting the disease from the identified source.

As a third example I'll illustrate with an occupational disease recently reported here in Grand Rapids. A private physician suspected that one of his patients, an auto mechanic, had lead poisoning and it was reported as such. In looking for the cause of this case of lead poisoning the trail led to a comparatively new process known as carbon blasting. In this process a stream of compressed air and rice or walnut shells is introduced into a car engine through a small tube which extends through the spark plug opening. The impact of the abrasive releases the carbon deposits from inside the engine. In the past it had been assumed that leaded gasoline when burned expended itself; however, such is not the case. An investigation made of this operation revealed that the concentration of lead in the mechanic's breathing zone averaged twenty-five times the safe limit. The result of this study was discussed with the manufacturers of this carbon blasting equipment and they are incorporating suggested changes in the design which will make the machinery reasonably safe under ordinary operating conditions. In Michigan approximately 150 garages are using this process. They are now in the process of being advised as to the protective measures necessary to safeguard the health of their workers. The thoughtfulness of the physician in reporting this unusual case of lead poisoning brought about a preventive program to protect the health of many garage workers. This is just one example of how occupational disease reporting can be of value when the private and public health teams are working together.

I have already pointed out how important it is to public health to have the understanding and cooperation of the physicians. Let me now enumerate a few of the ways your public health department helps the private physician. The health officer can, and should be, the voice of organized medicine in Government as well as the interpreter of governmental actions to the profession. Public health should be the social arm of medicine in keeping its fingers on the pulse of society and the body politic; while the practicing physician keeps his fingers on the pulse of the individual. In recent years, as the problems of acute communicable diseases and environmental sanitation have become less serious through public health administration, it has been inevitable that other problems would enlist the interest and action of the community. Thus we find increasing concern among the public with the problem of aging and its concomitant of chronic diseases. With the early detection and prompt treatment of cancer, tuberculosis, and diabetes, with the prevention and proper care of mental and emotional diseases; with the increasingly high proportion of deaths from heart disease and accidents, with expanding populations, migrating population, and the critical problems of mushrooming areas, the community is bound to make some effort to combat these common and serious problems. Those efforts will be less clumsy, less misdirected, less oblivious to the value of existing facilities, if the movement is guided by the health officer with his trained staff and if, in that guidance, he has the understanding and support and wisdom of the practicing physicians of his community.

The State Health Department through its branch laboratory or the local health department, provides diagnostic facilities for all communicable diseases, provides biological products and educational materials for the prevention of major preventable diseases. Not only does the public health education program continuously send people to the physicians' offices, but is getting them there earlier, before the condition is uncorrectible.

What do we do with all the physical defects discovered in our school examinations, vision and hearing screening programs? We try to get them into the offices of the private physicians for further investigation and treatment if indicated. For example, last year in Grand Rapids 951 children were referred by the Health Department to private physicians for impaired vision, 166 for impaired hearing, and 6,720 for other physical deficiencies.

What about such public health services as the Social Hygiene and Tuberculosis Clinics? Do they help private practice? They uncover work for private physicians that might otherwise have been missed and they create a desire for the same type of service in the private doctor's office. As a specific example of this when Dr. Pearl Kendrick first had her whooping cough vaccine ready for use, through agreement with this Society and the Health Department, it was offered both in the clinics and in the private physicians' offices. The first year approximately 90 per cent of the immunizations were done in the clinic and 10 per cent were immunized by private physicians. Three years ago a survey revealed those figures were reversed and 90 per cent were immunized in the doctor's office and 10 per cent in the clinics.

The Health Department can furnish the doctor needed information on vital statistics to help him evaluate and measure his and his colleagues' efforts in disease control.

I could give many more examples of how the health department can, and does, help the private physician, if time permitted, but I will only mention some of the specific instances of how the public health nurse can be of service to the private doctor. She refers patients to him for medical care and curative treatment, for periodical care and protective treatments, and for follow-up examinations. The public health nurse can assist the private physician by providing nursing care in the home. We believe that it represents a proper use of a public health nurse's time to, wherever possible, teach someone in the home how to carry out various procedures. Specifically, she can teach how to prepare and give a hypodermic—such as insulin. She can teach the young mother how to bathe her baby. The public health nurse can help with the home care of premature infants; first by seeing that home conditions are suitable before the baby is discharged from the hospital; second by giving nursing care if needed; and third by teaching the mother how to care for the baby so as to prevent exposure to infection. The public health nurse can show the mother how to give her child an inhalation. She can teach the patient's family how to take care of dressings such as with cancer and colostomy patients. She can assist with the care of rheumatic fever patients in the home by teaching bedside care; by interpreting what

(Continued on Page 112)

Ulcerative Colitis

Medical Treatment

By E. N. Collins, M.D.
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THE OUTLOOK of patients having chronic non-specific ulcerative colitis is much brighter today than it has been in the past. Today the sulfonamides, antibiotics, and corticotropin (ACTH) are proving helpful, but no one medicine is a cure. If surgical treatment is indicated, the entire colon and rectum can be removed and ileostomy performed in one or two stages with a lower mortality rate than formerly was associated with ileostomy alone. At the Cleveland Clinic 87 per cent of the patients have received medical treatment and 13 per cent surgical treatment.

No single cause of chronic non-specific ulcerative colitis has been established. Treatment, therefore, is non-specific. The natural history of the disease is one of remissions and recurrences of varying duration and intensity, so that it is difficult to evaluate any one form of treatment. Although the sulfonamides, antibiotics, and corticotropin (ACTH) are important adjuncts to medical therapy, basic therapy still consists of supportive and symptomatic measures. As Kirsner and Palmer[7] have stated, "General objectives include rest, elimination of infection, restoration of nutrition, and the solution of emotional difficulties."

No two patients present exactly the same problem. Brown and Crile[1] have emphasized the fact that the best psychiatric treatment is considerate and gentle care by the patient's family physician. The treatment should be individualized and guided by the presence of toxicity, complications, irreparable damage to the colon, and by the duration and severity of the disease, as well as the evaluation of previous treatments.

The type of colitis under discussion has a number of synonyms, such as non-specific, idiopathic, indeterminate, distal, and thrombo-ulcerative (Bargen's type I). It starts in the rectum with diffuse inflammatory, destructive, and hyperplastic processes, as seen by proctoscopic examination, and extends upward in the colon, as visualized by roentgen examination. This applies to 90 per cent of the patients we see. There may be segmental forms, but these are of secondary importance in this discussion.

A word should be said about diagnosis. It is accepted that surgical treatment is hazardous in the presence of amebic dysentery and this may mimic non-specific ulcerative colitis. Minimal examinations should include warm stool examinations, proctoscopic and roentgen examinations of the colon, as well as blood agglutinations and roentgen examination of the chest. Differential diagnosis should exclude for example: amebiasis, bacillary dysentery, carcinoma, lymphogranuloma venereum, typhoid and paratyphoid fevers, tuberculosis, and regional enteritis.

There is one contraindication to doing a barium enema roentgen examination. If the patient has acute abdominal distention and the initial scout x-ray film of the abdomen shows a huge dilatation of the colon, impending perforation is present (Fig. 1). It usually means that there has been extensive deep ulceration including the muscularis and in areas only a thin serosal sac may remain. If the initial plain film is made with the patient in the erect position and it shows air under the diaphragm, a perforation has occurred and immediate surgery is usually indicated.

Most of the patients we see are in the nontoxic phase of the disease, even though they may have had recurrent attacks for years. The groupings by Kiefer[5] help in classifying the severity of the disease (Table I).

TABLE I. GROUPINGS: (KIEFER)

Group I	Nontoxic Afebrile Non-sclerotic
Group II	Nontoxic Afebrile Sclerotic
Group III	Toxic

Early Nontoxic Phase

When the patient is seen early in the course of his disease, particularly when it is limited to the rectum or the rectum and the left colon, he may continue with his usual occupation and make a favorable response to simple measures.

Rest.—Both mental and physical rest are emphasized. Psychosomatic factors are important and are clarified, if possible, as a means of relieving nervous tension. The family doctor is in the best

From the Cleveland Clinic and the Frank E. Bunts Educational Institute.
Presented at the 1953 Michigan Clinical Institute, Detroit, Michigan, March 11, 1953.

position to administer this type of therapy. He knows the family background, environment, and habits of the patient.

If possible, the patient should have a mid-day rest period and complete rest while not at work.

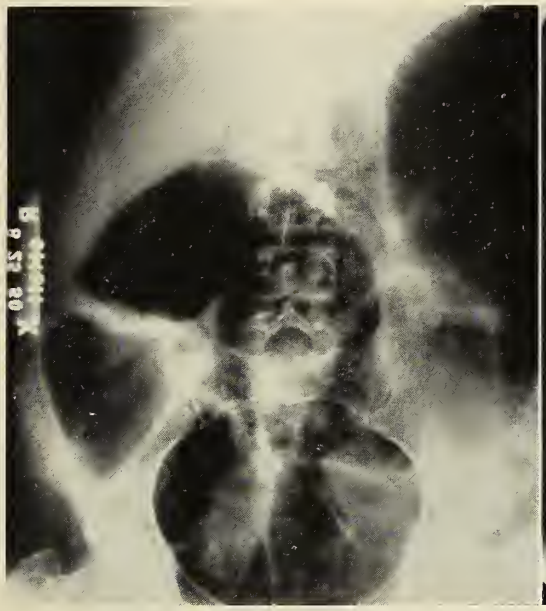


Fig. 1. Dilatation of the colon in acute fulminating toxic ulcerative colitis. Ileostomy and subtotal resection of the colon were performed in one stage.



Fig. 2. Nontoxic ulcerative colitis involving rectum, sigmoid and descending colon. Under medical treatment the patient returned to normal health, and the proctoscopic and roentgen findings returned to normal.

Diet.—A high-protein, high-carbohydrate, low-fat diet is routinely prescribed. The residue in the diet is varied according to the individual problem. It is restricted in most patients because of loose stools. Milk, a relatively high-residue food, usually is poorly tolerated by the patient. Small amounts of cream may be used on cereals.

A graded-residue high-protein diet is most often prescribed: no vegetables or fruits for the first five to eight days; then, addition of cooked vegetables and fruits slowly over the next two weeks; then, final addition of raw vegetables and fruits, as tolerated, until the patient is on a well-balanced diet. Seeds, skins and coarse fibers should be avoided during the active phase of the disease.

Supportive and Symptomatic Therapy.—Of course, the patient should be kept as comfortable as possible. We commonly give antispasmodics and/or mild sedation such as tincture of belladonna in full tolerance dosage and ¼ to ½ gr. of phenobarbital one-half hour before meals, if needed at the start of the treatment. Occasionally, one of the new anticholinergic drugs proves helpful. Later, these preparations are used only intermittently. In an occasional instance at the start of treatment, we prescribe 4 cc. of paregoric every third stool in any twenty-four-hour period, but we hesitate to give this advice because opium increases the tonicity of the colon and may prevent the proper discharge of purulent exudate. Iron and supplemental vitamins should be given according to individual need. If there is an iron deficiency anemia and the ingestion of iron is not well tolerated, several blood transfusions are given.

Sulfonamides.—We have used various sulfonamides since 1936.[2,3] One of our reports, published in 1946, concerned the use of succinylsulfathiazole (sulfasuxidine) in fifty-five patients studied for a period of two years.[4] In our experience, we have found that either sulfasuxidine or sulfathalidine proves beneficial in most of the early nontoxic cases. At the beginning of the program a regular course is established: Either preparation is given orally in 1- or 2-gram doses after meals and at bed-time daily for three weeks, stopped for one week, and then the course is resumed. If the patient makes satisfactory progress the rest intervals are lengthened.

When the patient is more comfortable, we give either preparation by retention enema: 2 gm. of powder, or four 0.5-gm. tablets, stirred in a glassful of warm water and given as a retention enema at bedtime in similar courses. A soft rubber ear bulb syringe may be used. During the early stages of treatment, an opium suppository may be used one hour before the retention enema is given, to aid in retaining the enema. This is unnecessary later.

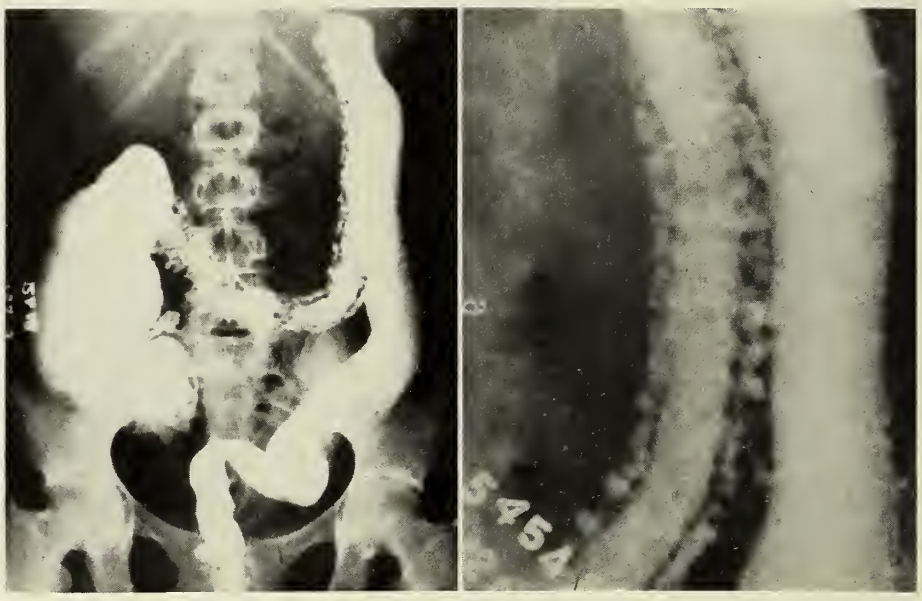


Fig. 3. Acute toxic ulcerative colitis with deep ulcerations. Medical management was helpful initially. However, ileostomy and subtotal resection of the colon were finally performed in one stage.

In patients whose disease is limited to the rectum or to the rectum and left colon, it is logical to assume that these non-absorbable sulfonamides when placed locally would have a greater effect than when taken orally. Most of the patients in this group state that this proves true.

Results of the foregoing therapy, which included sulfasuxidine, were reported as summarized in Table II.

In recent years if the patient does not make satisfactory progress, 100,000 units of soluble penicillin have been added to each retention enema.

From this table it would appear that the more extensive the disease, the less likely one should expect a favorable response to the treatment mentioned. However, it should be emphasized that the extent of the disease does not necessarily denote its toxicity or severity. The patient who is first seen in the early nontoxic phase, with involvement of only the rectum and sigmoid colon, may suddenly develop an acute fulminating process, spreading to all parts of the colon. The course of the disease is unpredictable. If the patient still does not make satisfactory progress, hospitalization and more intensive treatment are indicated.

TABLE II. RESULT OF THERAPY ACCORDING TO EXTENT OF DISEASE

	Cases	Remission	Improved	Not Improved
Rectum and sigmoid colon	23	20 (87%)	2 (9%)	1 (4%)
Rectum to splenic flexure	9	8 (88%)	1 (22%)	0
Rectum to hepatic flexure	10	7 (70%)	1 (10%)	2 (20%)
Entire colon	10	5 (50%)	0	5 (50%)
Entire colon and terminal ileum	3	1 (33%)	0	2 (66%)

Nontoxic Sclerotic Form

The patients in this group may have had the disease for years. They continue with their usual occupations, have few symptoms, and appear well though all the colon and terminal ileum may be involved. Their disease is of low-grade severity.

The previously advised treatment is used in this group, except the medications are given orally in patients having involvement of the entire colon.

Acute Toxic Phase

Patients who have the acute fulminating form of the disease are extremely ill. They have chills,

fever, vomiting, rapid pulse rate, are dehydrated and have prostration. They may be on the bed pan constantly (Fig. 3).

Gentle nursing care is of first importance.

Ample sedation should be given parenterally to keep the patient as comfortable as possible.

At the start of treatment we commonly give penicillin, 100,000 units of the crystalline form intramuscularly every three hours, followed by the use of the longer acting form which involves only one or two injections per twenty-four hours. For some patients the use of terramycin, 500 mg. administered twice daily in intravenous fluids for several days, has produced dramatic results. Formerly, sodium sulfadiazine was given intravenously to these patients.

Blood transfusions (slow drip method) may be life-saving. The blood should be doubly cross-matched, and only fresh blood should be used, as these patients tend to develop transfusion reactions. Blood transfusions may have a non-specific beneficial effect even in the absence of anemia.

Parenteral fluid therapy to re-establish and maintain electrolyte balance and a urinary output of 1000 to 1500 cc. daily, is imperative. Emphasis on the sodium and potassium ions is important.

Vitamin K can be given in the intravenous fluids at the start of treatment, according to the prothrombin time of the blood. It may not be properly synthesized in or absorbed by the intestines of these patients. Later, it can be given hypodermically or by mouth.

Oxygen may be indicated in the severely ill patient, because the intestinal mucosa is anoxic.

Constant gastric suction may be indicated, with complete rest of the digestive tract. Amino acids may be added to the intravenous fluids. As soon as the patient can tolerate feeding by mouth, adequate amounts of proteins and carbohydrates should be given, so that the diet will include at least 3000 calories daily, of which 150 calories should be protein.

Attention to the use of essential vitamins, particularly A, B, B complex, and C is important. The intramuscular use of crude liver extract and B complex is helpful.

Testosterone is sometimes helpful in restoring a positive nitrogen balance. Twenty-five mg. of testosterone propionate may be given intramuscularly every other day for as long as three weeks without producing masculinizing effects even in women.

Antibiotics.—When the patient is able to take oral medication, terramycin in doses of 250 to 500 mg. four times daily may be prescribed. While on this therapy many patients have had a remission of symptoms. However, some patients do not tolerate terramycin, aureomycin, or chloramphenicol (chloromycetin). A persistent enteritis may develop. Close supervision is necessary at all times.

Sulfonamides.—If the patient does not make a favorable response to antibiotics, we return to the use of sulfonamides. Formerly, in toxic patients we used sulfadiazine, but in recent years we have used 1 gm. of Azulfidine (formerly Azopyrine) four times daily with more favorable results, particularly when the disease is complicated by arthritis.

Corticotropin (ACTH).— To date, we believe the most important experience with ACTH was published by Kirsner and Palmer in the Oct. 6, 1951, issue of *The Journal of the American Medical Association.*[6] Observations were made of forty patients, and their conclusions were as follows:

(1) Corticotropin (ACTH) does not cure ulcerative colitis, but frequently induces a striking remission of the disease.
(2) Similar clinical improvement may occur without corticotropin, but usually is less rapid.
(3) Relapses are frequent, but thus far they seem less severe.
(4) The mechanism of the induced remissions is not yet known.

Our experiences with ACTH therapy coincide with those of the authors mentioned. The use of ACTH may reduce high fever and pulse rate to normal, but the frequency of stools and appearance of the rectal mucosa by proctoscopic examination may remain unchanged. It should be mentioned that perforation may occur during the use of ACTH therapy without adversely affecting the temperature or pulse rate. ACTH does not have a specific action in ulcerative colitis, and it sometimes masks a perforation. However,

when the patient has an acute fulminating disease, it may produce a striking remission of symptoms, and the proctoscopic findings may return to normal.

The intravenous administration of ACTH has proved superior to the intramuscular administration: 10 or 20 mg. given intravenously in 1000 cc. of 5 per cent glucose during a period of six or eight hours usually produces a better result than the intramuscular use of 120 mg. administered intermittently for twenty-four hours. It is well known that the ingestion of salt should be restricted and the oral use of potassium may be indicated during ACTH therapy. When the patient is discharged from the hospital, the slower acting forms of ACTH may be prescribed, such as an intramuscular injection every second or third day over a period of several months with favorable results.

We commonly use one of the sulfonamides, sulfathalidine or Azulfidine, with the ACTH therapy, but not continuously.

Our experience with cortisone therapy at this time is too limited to report.

Any patient with this disease who does not make a satisfactory response to comprehensive medical therapy should have the colon removed. This disease should not cause a patient to become a slave to the toilet or bed-pan, nor should he have persistent anemia or become an economic or social liability.

The possible presence of cancer is an absolute indication for surgery. The incidence of cancer of the colon is definitely higher in persons with chronic ulcerative colitis than in the general population; estimates vary from 1.5 to 10 per cent.

TABLE III. INDICATIONS FOR SURGERY

1. Acute toxic cases not responding to treatment
2. Chronic forms
   (a) Slave to bed-pan
   (b) Persistent chronic anemia
   (c) Inability to work
3. Possibility of carcinoma
4. Local complications
   Rectal and colonic strictures
   Fistulae
5. Systemic complications
   Arthritis, pyoderma, erythema nodosum, iritis
6. Repeated severe hemorrhages
7. Perforation

Usually it occurs in patients who have had ulcerative colitis for many years. It tends to occur at an earlier age than usual and is highly invasive. Even though the patient has a remission for years, roentgen examinations of the colon should be made at least once a year.

The other indications for surgery listed in Table III need no further comment.

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A HEALTHY TOWN IS BORN

White Pine, the new $40,000,000 mining and smelting project deep in Michigan's Upper Peninsula, has been called "Boomtown, 1953" but it shows what planning can be done, healthwise, in a new community. It's a far cry from the "old days" when a few shacks were thrown up near a mine shaft and given a name.

The town, which is being laid out, built and put into operation completely from scratch by November, 1954, is expected to become the permanent home of some 2,000 people, plus an expected 50 to 60 new babies each year. This means, among many other things, providing modern health and medical services.

With the advice and help of the AMA Council on Industrial Health and the American Hospital Association, these health facilities were given high priority. All medical services are housed in a 20-bed general hospital, which includes a maternity section, pharmacy and facilities for minor surgery.

Staff will include a medical director, a dentist, nurses, and, if required, a public health M.D. The medical director will serve as company doctor, handling pre-employment examinations and routine x-rays, but otherwise his relations with the townspeople will be those of a private physician.

Cystosarcoma of Breast (Phyllodes)

By Simon S. Farbman, M.D.
Detroit, Michigan

CYSTOSARCOMA of the breast (phyllodes) has been adequately reviewed in the literature since it was first described by Meuller in 1838. Notwithstanding the fact that this disorder is now a well-recognized entity, it is sufficiently rare that individual cases are worthy of publication.

Cystosarcoma has been classified under many other names such as giant intracanalicular myxoma, adenofibrosarcoma, intracanalicular adenoma fibromyxoma, tumor of Meuller, sarcoma-proliferum and polyposumintracanalicular.

The literature revealed 229 cases to date, which gives some indication of its rarity. This tumor is considered relatively benign except in rare cases where it may culminate in an inoperable malignancy.

Cystosarcoma phyllodes of the breast may be found in both sexes, but it is more frequent in women. The origin of this tumor is still controversial. Most investigators believe that cystosarcoma of the breast originates from a pre-existing small fibro adenoma, probably the intracanalicular variety, which exists innocuously. This is followed without definite cause by sudden and rapid growth.[6] Pregnancy and menstruation may exert the stimulus for accelerated growth. However, in many of the cases reviewed, no history of previous fibro adenoma existed. It is also believed by some that hormonal imbalance is the underlying cause of its sudden onset.

It is usually observed between the ages of thirty to sixty years, the greater percentage occurring at about forty years. A history of trauma exists in about 11 per cent. The tumor grows to an enormous size, the average weight being 7.6 pounds. The tumor is usually bulky, freely movable, definitely encapsulated and contains regions of fluctuations and resistance. The tumor is well encapsulated and is not adherent to the skin. There is no retraction of the nipple. The color of the skin surrounding the mass varies from normal to various shades of red to blue. The skin is elevated by the many lobules. The patient remains in good health generally. There is no axillary adenopathy.

Grossly, on cut sections, the tumor is found to consist of huge, well-encapsulated, intracystic, polypoid masses with cleft formation which contain hemorrhagic areas. The intracystic spaces are interchangeable and intercommunicating with other systic spaces.

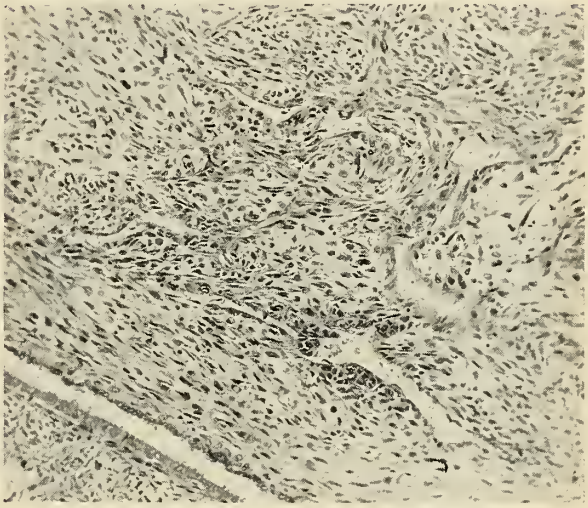


Fig. 1. Microphotograph showing the benign structural appearance of the cystosarcoma (phyllodes) and intracystic crypts. Spindle cells of the stroma run parallel to ductal clefts.

Histologically, the structure of a previous interductal fibroadenoma is usually recognized. Essentially it is a hyperplasia of the connective tissue stroma with little change in epithelial elements. The degree of change in connective tissue is characterized by mitosis and atypical cells which determines the malignancy.

At the present time there is no reliable way to predict the course of the neoplasm. Notwithstanding this fact, wide excision including the pectoral fascia is deemed sufficient treatment for the majority of cases. Following thorough excision, 6.6 per cent recur making the prognosis rather favorable. Roentgen rays have proven to be of little or no value in the treatment of cystosarcoma of the breast.

Case Report

Case 1.—Mrs. L. E., a widow, aged forty-five, first reported on November 24, 1952, with a history of a "funny feeling" in the left breast noticed first on November 20, 1952, while taking a shower. She noted

also that this tumorous mass grew rapidly and progressively. The patient also stated that during her menstruation she was cognizant of even more rapid growth. There was definitely no history of trauma. The last normal menstrual period started on November 21 and ended on November 24. No abnormalities of period were noted. There were no other associated symptoms.

Her general condition was excellent with no apparent loss of weight. The entire physical examination was essentially negative, including the routine laboratory work-up. Examination of left breast revealed the nipple to be intact, and there was no discharge. There was no retraction of the nipple. A tumorous mass was found, occupying the greater part of the left breast. The mass was irregular, lobulated, firm, freely moveable and not tender. There was no infiltration in the skin and no ulceration. The regional axillary lymph nodes were not palpable. The provisional diagnosis was cystic mastitis. Surgery was recommended.

On November 28, 1952, under sodium pentothal anesthetic a 61-cm. radial incision was made from the periphery of the areola. The tumor mass was easily exposed and by blunt dissection was readily isolated and removed. The localized and circumscribed character of the tumor and the absence of signs of extension indicated a favorable prognosis. The mass was bulky, freely moveable and well encapsulated and contained some regions of fluctuation and resistance.

Because it appeared apparently benign, the incision was closed. However, on November 30, 1952, the pathologist (Dr. G. Stobbe) reported the following:

Gross: "The encapsulated firm tumor measures 6 x 5½ x 5 cm. in size. The external surface is covered by pieces of fat. The cut surface of the tumor is firm, bulging and light gray. A few foci of softening are present throughout the tumor."

Microscopic: "Sections show a circumscribed cellular tumor of connective tissue in the mammary gland. This tumor is composed of spindle cells arranged in a haphazard manner. Mitotic figures are present throughout, and there are foci of necrosis throughout the tumor. The tumor is moderately vascular. The spindle cells compress the ducts of the mammary gland. The epithelium lining of the ducts exhibit slight hyperplasia, but there is no atypism of the epithelium component. This is a malignant fibrous connective tissue tumor."

Diagnosis: "Cystosarcoma phyllodes of mammary gland" (fibrosarcoma).

The microscopic slides were then sent to the Pathology Laboratory at the University of Michigan for further verification.

Report submitted by Dr. C. Weller on December 11, 1952, reported that:

"This is a spindle cell sarcoma which has arisen in an intracanalicular adenofibroma." He believed this neoplasm to be of local malignancy only.

On December 26, 1952, patient was advised of our findings and that simple mastectomy was recommended. Because of a severe asthmatic attack, arrangements were deferred to February 2, 1953.

Physical examination at this time was essentially negative except that at the site of the recent car on the left breast which healed well, a mass was found which resembled the original tumor. Again it was freely movable, not tender, irregular, and lobular. There were no palpable axillary lymphadenopathies.

A simple amputation of the breast, including the fascia over the pectoral muscles, was performed on February 2, 1953.

Pathologic report by Drs. Clarence Owen and G. Dorr Stobbe, of Grace Hospital, was submitted on February 3, 1953, as follows:

Gross: "The mammary gland measures 16 x 13 x 5 cm. The anterior surface contains an elliptical shaped piece of skin measuring 14 x 11 cm. in width. There is an old linear scar measuring 6 cm. in length which extends laterally from the periphery of the areola. The areola is normal. The nipple is slightly flattened. The mammary gland contains a nodular circumscribed tumor measuring 6 x 5½ x 4 cm. in size. The cut surface of the tumor for the most part is white, bulging, smooth, moist and partly resilient. Part of the tumor is pink. The tumor does not involve the skin."

Microscopic: "Sections of the mammary gland show that there is a tumor present which is composed of spindle cells arranged in a haphazard manner. Mitotic figures and foci of necrosis is present throughout the tumor. The tumor invades and compresses adjacent mammary gland tissue."

Diagnosis: "Malignant cystosarcoma phyllodes of mammary gland."

On April 10, 1953, the patient again presented herself with a recurrence of the mass along the inferior border of the scar of previous surgery. This time there were two individual definite masses. They were firm, freely movable and not tender. No change in her general health was found.

X-rays of the chest failed to reveal any metastasis.

On April 13, under sodium pentothol, the old incision was removed and the underlying fatty tissue including the growths were excised. At this time the encapsulation characterizing the previous surgery was absent. The tissue fell apart and more or less had to be scooped out.

The pathologic report again revealed "residual recurrent or metastatic cystosarcoma phyllodes."

Summary

1. A brief review of the subject—cystosarcoma phyllodes is made.

2. Tumor might easily be mistaken for inoperable malignancy. Its huge size and no lymph glands or surrounding tissue invasion proves its relative benignity.

3. Incidence of recurrence is much greater than previously believed.

4. Case report.

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Pheochromocytoma with Hypertension in Childhood

With a Case Report

By R. L. Schaefer, M.D., R. L. Schaefer, Jr., M.D., and James Christopher, M.D.
Detroit, Michigan

IN THE PAST few years much interest has been aroused and definitive knowledge has been gained regarding pheochrome tumors with sustained and paroxysmal types of hypertension. As recent as 1947 Cecil's *Text of Medicine,* the chapter entitled "Diseases of the Adrenal Gland," authored by Thorn,[6] makes the statement that no known cases of pheochrome tumor with hypertension had ever been reported in infants or young children. Cahill,[3] one of the outstanding clinical investigators in this field, however, in 1948, reported three: a girl aged twelve, a girl aged ten, and a boy aged eleven; and since that time several other reports have appeared in the literature.[5,15,16]

Case Report

Case 1.—J. R., a ten-year-old white boy was admitted to the hospital November 24, 1934, complaining of headache, vomiting, and dyspnea.

His present illness began six weeks prior to admission with generalized headaches associated with vomiting. Headaches were frequently located in the frontal areas but occasionally they were most severe over the occiput. During the first four weeks the headaches occurred periodically, but during the next two weeks they were constant, varying only in intensity. The patient experienced moderate dyspnea on exertion for the last four weeks.

Past history revealed that the only specific disease known was mumps. He had been subject to frequent upper respiratory infections. The mother stated that the patient was never robust and had been sickly most of his life.

Family history was not contributory.

Physical examination revealed a frail, white, male child of approximately ten years of age. Constitutional build was that of the asthenic type. Head was large with prominent frontal bossae and deepened orbital fossae. Eyes were prominent. Pupils were round, regular and equal. They reacted to light and accommodation. Fundoscopic examination showed bilateral papilledema more marked on the right with numerous hemorrhages and marked arteriolarspasm bilaterally. Ear drums were intact and canals were clear. Mucous membrances of the mouth were normal. Pharynx was normal. Chest was thin-walled. Percussion note was resonant throughout. No perceptible dyspnea was present on examination. Bilateral basilar, crepitant rales were noted posteriorly.

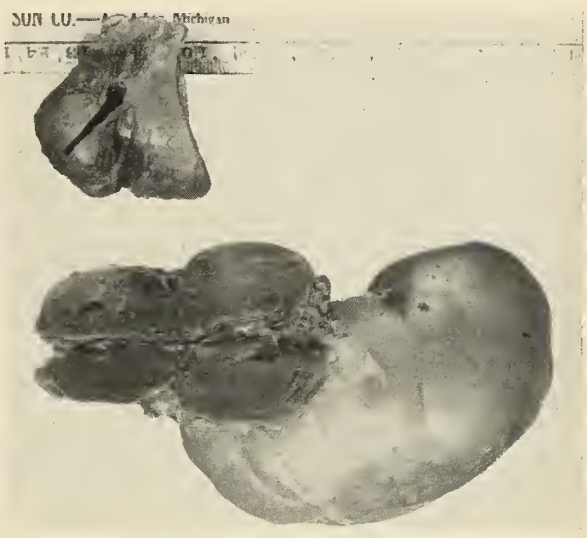


Fig. 1. Vascular engorgement of the kidney.

On percussion the heart appeared slightly enlarged both to the right and to the left. No murmurs were detected. Apical rate was 150 per minute and regular. Blood pressure was 280/210 in both arms. Abdomen was symmetrical. Liver, kidneys, spleen or other masses were not palpable. Extremities were normal. Reflexes were diminished but equal. Muscular strength was diminished but equal.

Laboratory Studies.—X-ray of the skull including the sella turcica was normal. X-ray of the chest was interpreted as a normal chest with no evidence of cardiac enlargement. Urinalysis revealed a trace of albumin, and on microscopic examination an occasional white blood cell and one hyaline cast were present; sugar was negative. Blood Count: red blood cells, 4,340,000; hemoglobin, 78 per cent; white blood cells, 14,800; differential: polymorphonuclears, 71; nonsegmented forms, 4; eosinophiles, 1; lymphocytes, 24. Blood nonprotein nitrogen: 32.0 mg. per 100 cc. blood. Blood Sugar: 100 mg. per 100 cc. blood. Spinal fluid: clear; normal pressure and dynamics; cell count, 4 lymphocytes; sugar, 90 mg. per cent; globulin, 1 plus; culture, negative.

Course.—The severe headache continued to be the sole symptom. Blood pressure ranged from 240 to 300 systolic and 150 to 170 diastolic. Temperature was normal throughout the hospital stay. Moderate sinus tachycardia was constant. The patient expired suddenly on December 1, 1934.

Autopsy.—The positive findings were: (1) moderate cardiac enlargement. (2) Coronary arteries were markedly thickened with involvement of all coats, especially the intima. (3) The lungs showed moderate

From Department of Medicine, Saint Joseph Mercy Hospital, Detroit, Michigan.

passive congestion. (4) The kidneys showed marked vascular engorgement. (5) The right adrenal gland measured 7 by 4 by 2 cm. (Fig. 1). It contained three oval nodular masses, two of which measured 3 by 3 by 2 cm.,

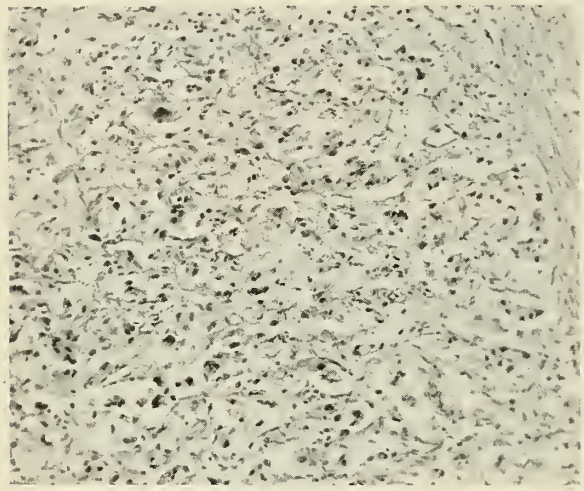


Fig. 2. Section of the adrenal masses.

and the other, 2 by 2 by 1 cm. The left adrenal gland measured 5 by 4.5 by 3 cm. It contained two nodules, the larger measuring 3 by 2 by ½ cm., the other, ½ by ½ by 1 cm. These masses were sharply encapsulated, yellowish in color, with radial striations, and of paler translucent central portion.

Microscopic.—Tumors are composed of rather large polygonal cells with granular acidophilic cytoplasm and small hyperchromatic nuclei. All cells are separated by a delicate connective tissue frame work (Fig. 2).

Discussion

Hypertensive disease *per se,* whether proxysmal or persistent, is unquestionably rare in childhood. However, we now believe that should it occur, the same diagnostic procedures pertaining to adult hypertension should be applied. Functioning pheochrome tumors are usually confined to the adrenal medulla althought they can occur in any portion of a chromaffin apparatus. As Cahill[4] notes, children seem to have a multiplicity of tumors compared with the adult.

Symptomatology of this type of tumor when functioning is due to the secretion of an excess amount of epinephrine and/or norepinephrine. When the secretion is persistent it gives a similar clinical picture as that of essential hypertension.[13,18,19] When the secretion is paroxysmal it gives rise to the originally described syndrome of paroxysmal hypertension. The paroxysmal variation of hypertension may be set off by several trigger mechanisms including emotional upset, fear, trauma, and massage of the tumor mass.

Diagnosis is suggested by history and physical findings of persistently or paroxysmally elevated blood pressure with or without associated symptoms and signs due to increase in circulating epinephrine. These additional signs and symptoms include headache, hyperhidrosis, palpitation, angina, dyspnea, nervousness, anxiety, fever, tachycardia, retinal angiospasms, elevated basal metabolic rate, glycosuria, and hyperglycemia.[2,21]

Specific diagnostic tests have in recent years been devised. These include (1) demonstration in the blood of an excess amount of epinephrine;[1] (2) the utlization of an epinephrine antagonist, Benzodioxane,[10] Dibenamine,[22] or Regitine.[7] This type of test is indicated when blood pressure is definitely elevated. Diagnostic response to these agents is a significant drop in blood pressure, but we must be aware that false positive reactions occur, such as with azotemia and sedation.[9] (3) The utilization of provocative and potentiating drugs, such as Histamine,[20] Mecholyl,[8,12] and Tetraethylammonium Bromide,[17] is indicated during normal tensive periods or when the hypertension is minimal. Diagnostic response here is a definite rise in blood pressure usually above that obtained with the cold pressor test. (4) The demonstration of the tumor by intravenous or retrograde pyelography or by perirenal or presacral air insufflation.

Surgical removal of the tumor is the only treatment. The utilization of all the precautions that are so vital in adrenal surgery is indicated, including the adrenolytic agents, preoperatively and prior to the removal of the tumor, and then the use of epinephrine or nonepinephrine plus the adrenal cortical hormone during surgery and the postoperative period.[11,14]

Summary

1. A case of pheochromocytoma with hypertension in childhood is presented with bilateral adrenal involvement.

2. A review of the recent literature reveals that active pheochrome tumors are not such a rarity in childhood as previously supposed.

3. Indicated diagnostic procedures outlined should be utilized if hypertension occurs in infancy or childhood.

(Continued on Page 78)

Detroit Physiological Society

Meeting of October 15, 1953

Blood Coagulation Mechanisms in Functional Thromboplastin Deficiencies

Shirley A. Johnson and Walter H. Seegers
Wayne University College of Medicine

An assay procedure has been devised for studying the activity of materials of plasma and serum which function together with platelet-AcG and calcium. Plasma or serum is added to purified prothrombin and calcium and platelet-AcG and the thrombin formation follows in a two-stage procedure.

Using this procedure, it has been found that serum shows less activity than plasma, and this has been referred to as the plasma-serum difference. In hemophilia this difference does not show up, while in plasma thromboplastin compound (PTC) deficiency the plasma-serum difference is always found. The activity of hemophilic plasma and serum, is equivalent to that for normal serum, and less, therefore, than that for normal plasma. In refractory hemophilia the activity of the plasma or serum is equivalent to that for classical hemophilia, but more normal plasma is required to restore this activity to normal than is the case with classical hemophilia.

Ether extraction of refractory hemophilic plasma and serum, hemophilic plasma and serum, PTC plasma and serum makes them equivalent in activator capacity to normal plasma in the assay procedure described. It is suggested that ether removes an inhibitor and thus enables the activities which take place in conjunction with platelet-AcG to be restored to their full potential.

Afferent Projections to the Cortex and Cerebellum of the Monkey.

E. D. Gardner and F. A. Morin
Department of Anatomy, Wayne University College of Medicine

The spinal pathways, cerebral cortex and cerebellum have been studied in cat, monkey and man by electrophysiological, neuroanatomical and clinical methods. The experimental work has been carried out in animals anesthetized with sodium pentobarbital or with pentothal, ether and curare. Cutaneous, muscular and articular nerves were stimulated electrically and the physiological stimuli of touch, pressure and movement were also used. In animals with intact spinal cords, potentials resulting from these stimuli were recorded from ipsilateral as well as contralateral sensory and motor cortex and from the anterior lobe and paramedian lobules or tonsils of the cerebellum.

Acute section of the dorsal funiculi at the 2nd cervical segment did not abolish any of the evoked potentials. These persisted even after extension of the incision so as to include the ventral and lateral funiculi of one side. In many experiments, potentials of reduced amplitude were still recorded from both cerebral cortex and cerebellum when but one ventral quadrant of the cord was left intact. Potentials from ipsilateral cortex were most liable to be diminished or abolished by cord incisions.

The results indicate that there are bilateral pathways in the ventrolateral region of the spinal cord by which impulses of different functional significance can reach the cerebral cortex and cerebellum. These pathways include not only the classically known but others which relay in the medulla oblongata, presumably in the reticular formation. The results obtained with the above techniques indicate that spinal tracts as anatomical units lack functional specificity.

Diagrams are presented which tentatively indicate the simplest possible arrangements of the ventrolateral sensory paths.

Convulsive Cortical Activity from Stimulation of the Hippocampus.

F. A. Morin
Department of Anatomy, Wayne University College of Medicine

Recent experimental work in man and lower animals indicates that a number of subcortical

regions are involved in convulsive disorders. The present work has studied the relationship of the hippocampal region to convulsive episodes in guinea pigs and cats. It was found that weak repetitive electrical stimulation of the fimbria and hippocampal commissure resulted in strong long-lasting cortical and cerebellar after discharges. These after discharges could still be recorded in the absence of the cellular layers of the neocortex and cerebellum.

The projections of the anterior thalamic nuclei to the limbic cortex, short or long intercortical connections, and the corpus callosum are not instrumental in the transmission of these effects either for the cerebral or cerebellar cortex.

The functional relationship of the hippocampal formation with the olfactory system has been questioned recently on anatomical grounds and the hypothesis has been submitted that this part of the brain plays some role in emotional behavior. There is clinical evidence that some parts of the hippocampal structure might be the site of origin of epileptic discharges. Our findings as a whole surely indicate that the hippocampal formation can change the normal pattern of the electrical activity of the cortex. This change consists mainly in high synchronization of cortical activity, often with the appearance of the grand mal pattern, and points to a strong tonic influence on cortical activity which is more evident and dramatic than similar actions shown by other subcortical structures. These results offer some experimental basis for the assumption that the hippocampal formation might be involved in some forms of epilepsy but do not contribute to the knowledge of functions of this structure under normal conditions which still remain very obscure.

FARM STATISTICS

In the last twenty-two years, the number of Americans working on farms has declined by 4.1 million, or a drop of 31 per cent. Land planted to farm crops has decreased 2 million acres, or five-tenths of one per cent; yet production of farm crops and livestock for human use has increased 38 per cent in the same time. Farm experts predict that by 1975 there will be 700,000 (or 8 per cent) less farmers and farm workers, 23 million (or 6 per cent) more acres of farm land, and an increased food production of 28 per cent.—CLARENCE J. BROWN, Member of Congress, Ohio, Letter December 29, 1953.

PHEOCHROMOCYTOMA

(Continued from Page 76)

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The Bricker Amendment

As you may have read in the news, Senator John Bricker of Ohio has proposed an amendment to the Constitution of the United States (S.J.Res. 1) to prevent any treaty or executive agreement with a foreign power or an international organization, such as the United Nations, becoming the law of the land without the full knowledge of and debate by both Houses of Congress. It will be well for us, as doctors of medicine, to know and to follow this proposed legislation, as there is a possibility that medical care can be socialized if certain international agreements, being pushed by the International Labor Organization (the ILO), are ratified by our government.

Under our Constitution at present, any treaty made by the executive branch of the government with a favorable two-thirds vote of the Senate has the full force of law throughout our country. No other nation in the world has such a setup. What Senator Bricker objects to is the possibility that the United States might enter into agreements or treaties that would allow a supra-national one-world government to interfere with our domestic as well as our international affairs. A recent ratification of the NATO Status of Forces Treaty has surrendered to local courts of NATO countries and Japan jurisdiction over non-military offenses by the personnel of our armed forces, their civilian employes and dependents. They no longer have the legal protection such as is guaranteed by our Constitution and Bill of Rights while on duty in the NATO countries and Japan. This is not true of the President of the United States and the diplomatic corps visiting those countries. They have the right of trial in our own courts. There is still an obligation for our government to protect their fundamental American rights. Why the two classes of citizens?

It is argued by opponents of the proposed amendment that it will handicap the President and the State Department in our country's relations and dealings with foreign governments. Perhaps it will. But let us be careful that we do not allow a small group of our lawmakers to surrender our Constitutional rights to any international organization. It has always been the policy of our country to stand by its word, and we all hope that policy will continue.

President's



Message

L. W. Hull

President, Michigan State Medical Society

Editorial

THE NEW YEAR

NINETEEN hundred fifty-four is here. Congress is in session, and there are some items of national legislation in which we are all interested. We refer to the whole people. The medical profession is vitally interested in some social legislation which has been or will be introduced in the Congress.

Of prime importance is the Social Security problem. The laws now on the books are promising 19 billions of dollars of old age insurance to the great mass of employed persons. Efforts are being made to increase that list by about 10 million workers, including those engaged in the self-employed professions—medicine, law, dentistry, architecture. Everyone knows the present set-up, or. thinks he does. Practically every worker who is covered, and who is paying Social Security taxes, thinks his benefit in old age or at retirement is secure. *Nation's Business* for December, 1953, exposed that canard. The employed person is entitled to his "insurance," except for the fact that Congress, by legislation, can change the law, using that money for some other social purpose. There is no "guarantee" that the money will be used for a benefit to the contributor in his old age. We "hope" it will be so used. There is no insurance policy.

We have been told all these years that this is an insurance. If so, why penalize the person who has earned benefits if he needs additional money for living? If the worker earns more than $75.00 a month, his benefit is completely cut off, until he is seventy-five years of age.

We, as doctors, know that older people must have some occupation—they cannot simply stop. Work is good for their health and mental adjustment. That being true, why deny them the most obvious remedy? Every doctor is interested on account of his patients and their own good. He is also interested as a matter of fundamental justice—he *may* be interested personally if the many "higher-ups," including the President, have their way. President Eisenhower has suggested extension of Social Security to cover medicine in the ten million he wants taken into the system. For the benefit of all, let us ask our Senators and Representatives to make these modifications.

For many years, we have advocated that legislation be passed making professional men at least the equal of men in industry. Industry can furnish old age or retirement annuities for its executive people, charging that cost to business expense. Bills have been in Congress allowing professional men, self-employed persons, to set aside a specified percentage of their income to invest in listed and controlled annuity-producing securities, the cost to be income-tax-free until the owner becomes a beneficiary. The Reid-Keough bills are intended to accomplish this purpose, and should have our support when contacting our Congressmen.

The Council of the Michigan State Medical Society and the House of Delegates of the American Medical Association have placed the medical profession on record as favoring the principle of the Senator Bricker amendment to the Constitution, eliminating the present provision that a treaty or executive agreement may supersede the provisions of the Constitution and the enacted laws of Congress or of the states. (Read the second paragraph of Article VI of the Constitution.

Another item to think about. Many are proposing some corrective legislation. Every doctor who has saved and bought a share of corporate stock is the victim of double taxation. General Motors in its report to the stockholders as of September 30, 1953, reported paying the government about $5.71 per share in income and excess profits before it was able to pay the stockholder, the owner of the Corporation, $1.00 per share. The stockholder's dividend is again taxed on the same earnings, an estimated average of 50 per cent. This is double taxation.

Such are some of the items before the national Congress in which we are interested and on which the Congressmen would like our opinion, if they are to represent us.

MEDICAL EDUCATION

SOME years ago, we reported a program being started in several states, but especially Mississippi, to educate young doctors for rural practice.

We have a Foundation in Michigan established primarily by doctors to promote Medical education with a provision that a loan can be made if the

applicant will agree to practice a definite length of time in an approved rural locality.

Mississippi has shown the way in a very impressive manner. *Look* magazine for November 17, 1953, has the report. About eight years ago, legislators and medical administrators together drafted a law, and passed it without dissent, which would raise a tax of approximately a quarter million and would loan up to $5,000 for an eligible young person to help provide four years of medical schooling. This program has been in operation and there are now approximately 250 young doctors practicing in rural Mississippi.

The student agrees to practice two years in a community or repay the loan. If he stays five years, the loan is cancelled. Less than $25,000 has been repaid out of a million and a half loaned. The State of Mississippi and the medical profession of Mississippi are very well satisfied, and they would prefer that no loans be repaid, as the objective is to secure country doctors.

There is a waiting list of about sixty applicants for this loan over and above the available money.

Several other states are doing a creditable job in supplying country doctors. The Wisconsin State Medical Society has a loan fund. In Illinois, loans must be repaid into a revolving fund to finance more students. About twelve states have loan or scholarship programs.

CONSERVING THE SERVICE PLANS

THE voluntary non-profit health plans are having growing pains. In Michigan, we have found certain usages develop which are causing an unnecessary financial loss. Last month, we published a statement signed by the chairman of an important committee appointed by The Council of the Michigan State Medical Society, reporting some vital facts developed by a study of about 12,000 consecutive hospital admissions.

Other states have uncovered similar trends. About two years ago, the California Physicians Service found some abuse and excess demand in its plan. The California Medical Association made a thorough study, called together many of its advisers, and at the state meeting developed corrective measures.

New Jersey had a similar experience, and much of the program of their annual session in May, 1953, was devoted to the problems of the medical-surgical plan. Adjustment and re-evaluation of services provided were necessary. Similar experiences are being reported generally.

The Michigan Study showed a considerable burden thrown on the plans by hospitalization for diagnosis. Our own JOURNAL has commented before on the subject of faulty utilization. Read the editorials, "Solvent!!" (page 630, June, 1951) and "Sabotage" (page 302, March, 1951). In September, 1952 (page 1222) appeared "Hospital Over-usage and Expense," all anticipating the present state of concern for the well-being of our voluntary non-profit service organizations by which we have greatly benefited our patients and stayed the progress of socialized medicine.

We shall continue to call the attention of the membership to these abuses, trusting that their uncovering will put a stop to the undermining of our voluntary non-profit program.

If each patient stayed one extra day in the hospital, the cost would be 10 million dollars. Every individual doctor has a responsibility—he, rather than the other fellow, must be active in preserving our own service plan.

MEDICAL PUBLIC RELATIONS

ONE of the greatest needs of the leaders of the medical profession for the past several years has been good public relations between our members and our public. Much has been written, a tremendous amount of money has been spent, and still we hear criticism.

Our great organizations, Blue Cross and Blue Shield, were developed and sponsored for the purpose of making medical and hospital services available to our patients. They proved also to be a barrier against the creeping socialism—the ever present threat of government taking over the practice of medicine.

Much of the lack of good public relations between our members and our patients stems from misunderstanding, primarily, of charges for our work. The most common criticism we hear is that medical and hospital costs are "too high." Our advisors have told us for years to have an exact understanding about charges to allay this most important complaint.

Since we have been operating Michigan Medical Service, we have had an unusual opportunity to make some observations. Doctors in several

(Continued on Page 93)

Michigan State Medical Society Past Presidents 1912-1921



The patriotic fervor and bitter fighting of World War I, the pre-war industrial surge and the postwar boom times, characterized the tense era from 1912 to 1921. Many Michigan doctors distinguished themselves in military service. They served with Base Hospital No. 17, headed by Angus McLean, M.D., and Base Hospital No. 36, organized by Burt R. Shurly, M.D., and with field hospitals and fighting units in every combat sector. One-third of the Wayne County Medical Society was in uniform.

Names of MSMS presidents of this era are well known today, among them Andrew P. Biddle, M.D., founder of the Biddle Lecture presented at each Annual Session, and Charles H. Baker, M.D., father of Robert H. Baker, M.D., current President-elect. It was in 1914 that Victor C. Vaughan, M.D., well-remembered Dean of the University of Michigan Medical School, served as President of the American Medical Association, fourth and most recent Michigan man to bear that honor.

(MSMS Presidents from 1922 to 1930 will be featured in an early number.)

Michigan Clinical Institute

SHERATON-CADILLAC HOTEL, DETROIT

Wednesday-Thursday-Friday, March 10-11-12, 1954

Wilfrid Haughey, M.D., Battle Creek, General Chairman

Information

- **HEADQUARTERS**—Sheraton-Cadillac Hotel: Assemblies, Exhibits and Press Room on Fourth Floor.

- **REGISTER**—Top of stairs—Fifth Floor, Sheraton-Cadillac Hotel—as soon as you arrive.

  Hours: **Tuesday, March 9—1:00 p.m. to 5:00 p.m.**
  Wednesday, March 10—7:30 a.m. to 5:00 p.m.
  Thursday, March 11—8:30 a.m. to 5:00 p.m.
  Friday, March 12—8:30 a.m. to 3:30 p.m.

- **NO REGISTRATION FEE** for Members of MSMS and other State Medical Associations, AMA, and Canadian Medical Association.

- **ADMISSION BY BADGE ONLY** to all Assemblies, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership Card to expedite registration.

- **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada and physicians of the Army, Navy, and U. S. Public Health Service are invited to attend, as guests. No registration fee. Please present credentials at the Registration Desk.

  Bona fide doctors of medicine who are associate or probationary members of Michigan county medical societies or who are serving as residents or interns, if vouched for by the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests, with no registration fee. Please present credentials at the Registration Desk.

- **MICHIGAN DOCTORS OF MEDICINE**, in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests upon payment of $25.00. This amount will be credited to them toward dues in the Michigan State Medical Society FOR 1954 ONLY, provided they subsequently are voted into membership by the County Medical Society in whose jurisdiction they practice.

- **DOCTOR**, register Tuesday, to save your time! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1954 Michigan Clinical Institute. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

  We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, March 9, from 1:00 to 5:00 p.m., Fifth Floor, Sheraton-Cadillac Hotel.

- **TELEPHONE SERVICE**—Local and long distance telephone service will be available in the Sheraton-Cadillac Hotel, fourth floor. In case of emergency, physicians will be paged from the meetings by announcement on the screen. Call the Sheraton-Cadillac Hotel, Detroit, Woodward 1-8000, and ask for the Michigan Clinical Institute extensions on the fourth floor.

- **CHECKROOM** is available in the Sheraton-Cadillac Hotel, fourth floor, next to Grand Ballroom.

- **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Committee on Arrangements. This request is made in order to avoid confusion and disappointment on the part of members of the audience.

- **PAPERS WILL BEGIN AND END ON TIME**—Nothing makes a scientific meeting more attractive than by-the-clock promptness and regularity; therefore, all meetings and panels will open on time, all speakers will be required to begin their talks exactly on time and to close exactly on time, in accordance with the schedule in the Program. All who attend the Institute are respectfully requested to assist in attaining this end by noting the schedule carefully and by being in attendance accordingly, in order not to miss that portion of the program of greatest interest.

- **TECHNICAL EXHIBITS**—Seventy-four interesting and instructive displays—will open daily at 8:30 a.m. and close at 5:15 p.m., except on Friday when the exhibit breaks up at 3:30 p.m. Frequent intermissions to view the exhibits have been arranged daily before, during and after the assemblies.

- **THERE IS SOMETHING** of interest or education in the large exhibit of technical displays.
  SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN CLINICAL INSTITUTE.

- **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Michigan Clinical Institute. Notify H. H. Cummings, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann St., Ann Arbor, Michigan.

THREE DISCUSSION CONFERENCES

These quiz periods will be held Wednesday-Thursday-Friday, March 10-11-12, Grand Ballroom, Sheraton-Cadillac Hotel, 5:00 to 6:00 p.m. with all the guest speakers of the day invited to appear on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them, is thus provided.

• **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel is available at the Book Tower Garage, 333 State, the DAC Garage, 1754 Randolph, and the Grand Circus Garage, 1776 Randolph.

• **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan Clinical Institute. All subjects on the Institute Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

• **"UBIQUITOUS HOSTS"**—The following doctors of medicine have placed themselves at the disposal of the nine out-of-Michigan guest essayists who grace the program of the eighth annual Michigan Clinical Institute in Detroit; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the United States:

Z. S. Bohn, M.D., Detroit; W. B. Cooksey, M.D., Detroit; M. A. Darling, M.D., Detroit; Leon DeVel, M.D., Grand Rapids; H. A. Howes, M.D., Detroit; G. T. McKean, M.D., Detroit; E. R. Sherrin, M.D., Detroit; G. C. Thosteson, M.D., Detroit; and E. A. Wishropp, M.D., Grosse Pointe.

• **WILFRID HAUGHEY, M.D.**, Battle Creek, is General Chairman of Arrangements for the 1954 Michigan Clinical Institute.

• **PRESS RELATIONS COMMITTEE** for the 1954 Michigan Clinical Institute:

C. L. Weston, M.D., Owosso, Chairman; H. F. Dibble, M.D., Detroit; A. B. Gwinn, M.D., Hastings; R. A. Johnson, M.D., Detroit; and E. F. Sladek, M.D., Traverse City.

• **SCROLL TO WM. J. STAPLETON, JR., M.D.**, Detroit, chosen by the Michigan State Medical Society House of Delegates in September as "Michigan's Foremost Family Physician of 1953." Dr. Stapleton will be honored on Wednesday, March 10, when the scroll emblematic of his new title will be presented to him just before adjournment of the morning assembly of the M.C.I.

• **A TESTIMONIAL LUNCHEON** honoring Wm. J. Stapleton, Jr., M.D., will be held Wednesday, March 10, at 12:15 p.m. in the English Room of the Sheraton-Cadillac Hotel. All MSMS members are invited to this subscription luncheon, sponsored by the Wayne County Medical Society.

• **A TESTIMONIAL DINNER** honoring John M. Sheldon, M.D., President of the American Academy of Allergy, has been arranged by the Michigan Chapter, American Academy of Allergy, for Friday, March 12, Pan American Room, Sheraton-Cadillac Hotel, 6:30 p.m.

• **LUNCHEON HONORING SYKES LECTURER** Eugene P. Pendergrass, M.D., of Philadelphia, will be held Wednesday, March 10, at 12:15 p.m. in the Founders Room, Sheraton-Cadillac Hotel. All M.C.I. registrants are invited to this subscription luncheon sponsored by the Southeastern Michigan Division and the Michigan Division of the American Cancer Society, by the Michigan Clinical Institute, and by the Michigan State Medical Society.

• **LUNCHEON HONORING H. HOUSTON MERRITT, M.D.**, New York City, is scheduled for Friday, March 12, at 12:00 noon in Parlors G-H-I of the Sheraton-Cadillac Hotel. The Michigan Epilepsy Center is sponsor of this luncheon.

• **MEETING FOR RESIDENTS, INTERNS AND SENIOR MEDICAL STUDENTS**

Residents, interns and senior medical students of Michigan will be honor guests at a special meeting arranged during the 1954 Michigan Clinical Institute, on Wednesday, March 10, beginning at 2:30 p.m. This meeting in the Pan American Room, Sheraton-Cadillac Hotel, Detroit, will include the following program:

2:30 p.m. Registration
3:00 p.m. Program
4:00 p.m. Intermission to View Exhibits
4:30 p.m. Program
5:30 p.m. Reception

• **ACKNOWLEDGMENTS:** The Michigan Clinical Institute gratefully acknowledges the co-operation of

1. R. S. Sykes, D.D.S., Muir, Michigan, sponsor of the Sykes Lecture presented by Eugene P. Pendergrass, M.D., of Philadelphia.
2. The Michigan Regional Committee on Trauma, American College of Surgeons, sponsor of the Trauma program (five speakers) on Wednesday afternoon, March 10.
3. The Michigan Diabetes Association, sponsor of John H. Warvel, Sr., M.D., of Indianapolis.
4. The Michigan Heart Association, sponsor of the Heart and Rheumatic Fever Program on Friday, March 12.
5. The Michigan Foundation for Medical and Health Education, Inc., sponsor of Albert B. Sabin, M.D., Cincinnati, the Foundation Lecturer.
6. Michigan Medical Service and the Michigan State Medical Society, co-sponsors of the Conference for Residents, Interns and Senior Medical Students.
7. Smith, Kline and French Laboratories, Philadelphia, for sponsorship of the color television program beamed to the MCI meeting room; and Detroit's Harper Hospital and its medical staff for co-operation in arranging and producing the 3-days' TV scientific presentations.
8. Davis & Geck, Inc., Danbury, Conn., for sponsorship of the color motion pictures shown during the MCI in the Normandie Room, Sheraton-Cadillac Hotel.
9. The Wayne County Medical Society, sponsor of the luncheon honoring Wm. J. Stapleton, Jr., M.D., Michigan's Foremost Family Physician.
10. The Michigan Division and the Southeastern Michigan Division of the Michigan Cancer Society, and the Michigan State Medical Society, sponsors of the luncheon honoring Eugene P. Pendergrass, M.D., Philadelphia, R. S. Sykes Lecturer.
11. The Michigan Epilepsy Center, sponsor of the luncheon honoring Guest Speaker H. Houston Merritt, M.D., New York City.
12. Michigan Chapter, American Academy of Allergy, sponsor of the testimonial dinner honoring John M. Sheldon, M.D., Ann Arbor.
13. Michigan Medical Service, which contributed 3,000 notepads for use of MCI registrants.

THE "BLOCK SYSTEM"
at the
1954 MICHIGAN CLINICAL INSTITUTE

Surgery—Cancer—Diabetes—Wednesday morning, March 10
Trauma—Wednesday afternoon, March 10
Obstetrics - Gynecology - Pediatrics — Thursday morning, March 11
Internal Medicine (Subjects with Surgical Aspects)—Thursday afternoon, March 11
Heart and Rheumatic Fever — Friday morning, March 12
General Medicine—Friday afternoon, March 12

• MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

Tuesday, March 9, 1954

1. **The Michigan Chapter, American College of Surgeons** will meet in the Grand Ballroom, Sheraton-Cadillac Hotel as follows:
   8:30 a.m. Registration
   9:30 a.m. Program followed by discussion period
   2:00 p.m. Program followed by a business meeting
   6:30 p.m. Cocktails
   7:15 p.m. Dinner
   9:00 p.m. Entertainment

Wednesday, March 10, 1954

2. **The Woman's Auxiliary to the Michigan State Medical Society** will hold a Board meeting in the Founders Room, Sheraton-Cadillac Hotel, beginning at 10:00 a.m. Registration will open at 9:30 a.m. Luncheon at 12:00 noon will be served in Parlors G-H-I.
3. **A Conference for Residents, Interns and Senior Medical Students** is scheduled for the Pan American Room, Sheraton-Cadillac Hotel, beginning at 2:30 p.m. A reception will be held at 5:30 p.m. with Michigan Medical Service as host.
4. **The Executive Committee of the Michigan Academy of General Practice** will meet for dinner at 7:00 p.m. in Suite 500 of the Sheraton-Cadillac Hotel.
5. **The Executive Committee of the Michigan Health Council** will meet for luncheon in Parlor F of the Sheraton-Cadillac Hotel at 12:00 noon.
6. **The Michigan Diabetes Association** will hold a dinner-meeting at 6:30 p.m. in Parlor F of the Sheraton-Cadillac Hotel.
7. **The Michigan Regional Committee on Trauma, American College of Surgeons,** will hold a luncheon and meeting beginning at 12:00 noon in the Pan American Room, Sheraton-Cadillac Hotel.
8. **Harper Hospital Reunion** is scheduled for the Grand Ballroom with a reception at 6:30 p.m., dinner at 7:30 p.m. followed by entertainment at 9:00 p.m.
9. **A luncheon honoring Wm. J. Stapleton, Jr., M.D.,** Detroit, Michigan's Foremost Family Physician for 1953, is scheduled for the English Room at 12:15 p.m.
10. **A luncheon honoring Eugene P. Pendergrass, M.D.,** Philadelphia, the 1954 R. S. Sykes Lecturer, is scheduled for the Founders Room at 12:15 p.m.

Thursday, March 11, 1954

11. **"Golden Goose" Breakfast,** English Room, Sheraton-Cadillac Hotel, Thursday at 7:00 a.m. All M.D. registrants at M.C.I. are cordially invited.
12. **The Michigan Society of Neurology and Psychiatry** will hold a dinner-meeting in the Pan American Room of the Sheraton-Cadillac Hotel beginning at 6:00 p.m.
13. **The Michigan Branch of the Academy of Pediatrics** will meet for dinner at 6:30 p.m. in the Founders Room, Sheraton-Cadillac Hotel.
14. **The Michigan and Detroit Proctologic Society** will hold a dinner-meeting at 6:00 p.m. in Suite 500 of the Sheraton-Cadillac Hotel.
15. **The Michigan Chapter, Arthritis and Rheumatism Foundation** will meet for dinner at 6:30 p.m. in Parlor F of the Sheraton-Cadillac Hotel.

Friday, March 12, 1954

16. **A testimonial dinner** honoring John M. Sheldon, M.D., Ann Arbor, President of the American Academy of Allergy, will be held in the Pan American Room, Sheraton-Cadillac Hotel at 6:30 p.m.
17. **The Michigan Heart Association** members' meeting is scheduled for 9:00 a.m. in the Grand Ballroom and will adjourn in time for the Assembly of the Michigan Clinical Institute beginning at 9:20 a.m.
    The Michigan Heart Association Board will meet for dinner at 6:30 p.m. in the Founders Room of the Sheraton-Cadillac Hotel.
18. **Luncheon honoring** H. Houston Merritt, M.D., New York City, is scheduled for 12:00 noon in Parlors G-H-I.
19. **The Wayne University Alumni Association** will have a headquarters suite in the Sheraton-Cadillac Hotel, Detroit, during the 1954 Michigan Clinical Institute on Wednesday and Thursday, March 10-11.

MUCH THAT IS NEW AND INTERESTING WILL BE FOUND IN THE MCI EXHIBIT

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HOTEL RESERVATONS

MICHIGAN CLINICAL INSTITUTE
Detroit, March 10-11-12, 1954

The reservation blank below is for your convenience in making your hotel reservation in Detroit. Please send your application to George F. Ralston, Jr., Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels,
Michigan Clinical Institute,
c/o Sheraton-Cadillac Hotel,
Detroit, Michigan

Attention: George F. Ralston, Jr.

Please make hotel reservation (s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving March.....hour.....A.M.....P.M.

Leaving March.....hour.....A.M.....P.M.

Hotel of First Choice: .....

Second Choice: .....

Names and addresses of all applicants including person making reservation:

Name	Address	City	State
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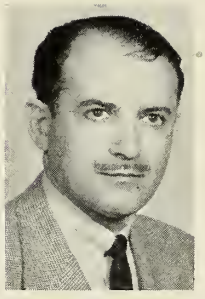
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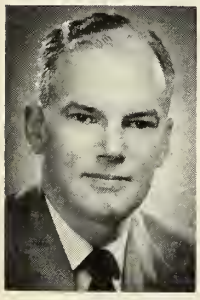
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B. P. Colcock, M.D.



T. Wilensky, M.D.



W. H. Steffensen, M.D.



E. P. Pendergrass, M.D.



J. H. Warvel, Sr., M.D.

Program

WEDNESDAY, MARCH 10, 1954

SHERATON-CADILLAC HOTEL, DETROIT

A.M.

7:30 REGISTRATION—Top of Stairs, Fifth Floor

8:30 EXHIBITS OPEN—Fourth Floor

FIRST ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

G. C. Penberthy, M.D., Detroit, *Chairman*

8:50 **WELCOME**

L. W. Hull, M.D., Detroit
President, Michigan State Medical Society

R. A. Johnson, M.D., Detroit
President, Wayne County Medical Society

Three Surgical Talks

9:00 **"The Surgical Treatment of Thyroid Disease"**

Bentley P. Colcock, M.D., Boston, Massachusetts
Surgeon, Staff of Lahey Clinic, New England Deaconess Hospital and New England Baptist Hospital

9:30 **"Surgical Significance of Diarrheas"**

Thomas Wilensky, M.D., Lansing
Senior Attending Surgeon, E. W. Sparrow Hospital; Attending Surgeon, St. Lawrence Hospital

9:50 **"Points of General Interest Regarding the Cleft Lip and Cleft Palate Patient"**

Wallace H. Steffensen, M.D., Grand Rapids
Consultant in Plastic Surgery, Blodgett Memorial Hospital

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **THE R. S. SYKES LECTURE**

"The Consideration of Some of the Difficulties Concerned with the Early Diagnosis of Cancer of the Lung"

Eugene P. Pendergrass, M.D., Philadelphia, Pennsylvania
Director, Department of Radiology, Hospital of University of Pennsylvania; Professor of Radiology, School of Medicine and Graduate School of Medicine, University of Pennsylvania

DIABETES

The Michigan Diabetes Association is sponsor of this talk

11:30 **"The Treatment of Diabetic Emergencies"**

John H. Warvel, Sr., M.D., Indianapolis, Indiana
Staff of the Diabetic Department of Methodist Hospital

12:00 **End of First Assembly**

P.M.
1:00

Color television program, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Harper Hospital, Detroit, and Smith, Kline and French Laboratories of Philadelphia.



H. W. Harris, M.D.

3:00 INTERMISSION TO VIEW EXHIBITS

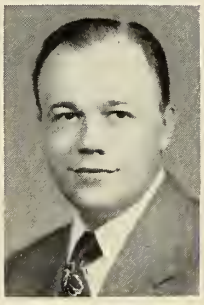
SECOND ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

V. C. Abbott, M.D., Pontiac, *Chairman*

Five Trauma Subjects

The Michigan Regional Committee on Trauma, American College of Surgeons, is sponsor of the trauma talks



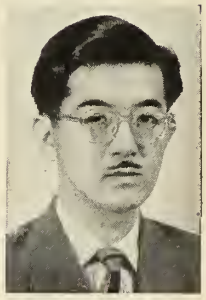
C. M. Hanson, M.D.

3:50 "Fractures and Dislocations of the Elbow"
Herbert W. Harris, M.D., Lansing
Chief of Staff, St. Lawrence Hospital; Orthopedic Surgeon, Edward W. Sparrow Hospital

4:05 "Indications for Surgery in Cranio-cerebral Injuries"
Richard C. Schneider, M.D., Ann Arbor
Associate Professor of Surgery, Section of Neurosurgery, University of Michigan Medical School and Hospital

4:20 "The Clavicle in Trauma"
Curtis M. Hanson, M.D., Kalamazoo
Orthopedic Physician

4:35 "The Use of the Artificial Kidney"
Lloyd T. Iseri, M.D., Detroit
Assistant Professor of Medicine, Wayne University College of Medicine



L. T. Iseri, M.D.

4:50 "X-Ray Aids in Abdominal Trauma"
James E. Lofstrom, M.D., Detroit
Chairman, Division of Radiology, Wayne University College of Medicine; Director, Department of Radiology, Detroit Memorial Hospital; Director, Department of Radiology, Detroit Receiving Hospital

5:05 End of Second Assembly

5:10 DISCUSSION CONFERENCE

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: F. A. Coller, M.D., Ann Arbor

Participants: Bentley P. Colcock, M.D., Boston; Curtis M. Hanson, M.D., Kalamazoo; Herbert W. Harris, M.D., Lansing; Lloyd T. Iseri, M.D., Detroit; James E. Lofstrom, M.D., Detroit; Eugene P. Pendergrass, M.D., Philadelphia; Richard C. Schneider, M.D., Ann Arbor; Wallace H. Steffensen, M.D., Grand Rapids; John H. Warvel, Sr., M.D., Indianapolis, and Thomas Wilensky, M.D., Lansing.



J. E. Lofstrom, M.D.

6:10 End of Discussion Conference

* * *

No Michigan Clinical Institute Meeting Wednesday Evening



C. S. Stevenson, M.D.



T. N. Evans, M.D.



J. L. Wilson, M.D.



W. W. Zuelzer, M.D.



A. B. Sabin, M.D.



H. M. Pollard, M.D.

THURSDAY, MARCH 11, 1954

SHERATON-CADILLAC HOTEL

A.M.
8:30 **REGISTRATION—Top of Stairs, Fifth Floor**
EXHIBITS OPEN—Fourth Floor

THIRD ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

J. M. Sheldon, M.D., Ann Arbor, *Chairman*

Four Obstetrics-Gynecology-Pediatrics Talks

9:00 **"Anesthesia and Analgesia in Obstetrical Practice"**
Charles S. Stevenson, M.D., Detroit

9:20 **"Intra-Uterine Causes of Fetal Anoxia"**
Tommy N. Evans, M.D., Ann Arbor
Instructor, Department of Obstetrics-Gynecology, University of Michigan School of Medicine

9:40 **"Respiratory Failure in the Newborn"**
James L. Wilson, M.D., Ann Arbor
Professor of Pediatrics and Communicable Diseases

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"The Pathology of Respiratory Failure of the Newborn"**
Wolf W. Zuelzer, M.D., Detroit
Professor of Pediatric Research, Wayne University College of Medicine; Director of Laboratories, Children's Hospital of Michigan

11:20 **THE MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION, INC., LECTURE**
"Vaccination for Poliomyelitis"
Albert B. Sabin, M.D., Cincinnati, Ohio
Professor of Research in Pediatrics, University of Cincinnati College of Medicine

11:50 **End of Third Assembly**

P.M.
1:00 **Color television program,** beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Harper Hospital, Detroit, and Smith, Kline and French Laboratories of Philadelphia.

3:00 **INTERMISSION TO VIEW EXHIBITS**

FOURTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

W. H. Steffensen, M.D., Grand Rapids, *Chairman*

Three Internal Medicine Subjects
(with surgical aspects)

3:50 **"Gastrectomy for Chronic Duodenal Ulcer"**
H. Marvin Pollard, M.D., Ann Arbor
Professor of Internal Medicine, University of Michigan Medical School; Governor for Michigan, American College of Surgeons; Secretary, American Gastroenterological Association; President, American Gastroscopic Society

P.M.

4:10 "Manifest Bleeding from the Digestive Tract; Notes on Diagnosis and Treatment on the Basis of Personal Experience"

GEORGE B. EUSTERMAN, M.D., Detroit

Chief of Medicine and Director of Medical Education, Sinai Hospital of Detroit



G. B. EUSTERMAN, M.D.

4:40 "Alcoholism and Cardiovascular Disease"

FRIEDRICH W. NIEHAUS, M.D., Omaha, Nebraska

Professor of Medicine, University of Nebraska College of Medicine

5:10 End of Fourth Assembly

5:10 DISCUSSION CONFERENCE

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: WM. S. REVENO, M.D., Detroit

Participants: GEORGE B. EUSTERMAN, M.D., Detroit; TOMMY N. EVANS, M.D., Ann Arbor; FRIEDRICH W. NIEHAUS, M.D., Omaha, Nebraska; H. MARVIN POLLARD, M.D., Ann Arbor; ALBERT B. SABIN, M.D., Cincinnati, Ohio; CHARLES S. STEVENSON, M.D., Detroit; JAMES L. WILSON, M.D., Ann Arbor, and WOLF W. ZUELZER, M.D., Detroit.



F. W. NIEHAUS, M.D.

6:10 End of Discussion Conference

No Michigan Clinical Institute Meeting Thursday Evening

FRIDAY, MARCH 12, 1954

SHERATON-CADILLAC HOTEL

A.M.

8:30 REGISTRATION—Top of Stairs, Fifth Floor

EXHIBITS OPEN—Fourth Floor

FIFTH ASSEMBLY

FIFTH ANNUAL MICHIGAN HEART DAY

Grand Ballroom, Sheraton-Cadillac Hotel

FRANK VAN SCHOICK, M.D., Jackson, *Chairman*

Five Heart Subjects

The Michigan Heart Association is sponsor of the heart talks

A.M.

9:00 Meeting of Michigan Heart Association Members

9:20 "Observations on Congenital Cardiac Malformations"

STANLEY GIBSON, M.D., Chicago, Illinois

Consultant in Cardiology, Children's Memorial Hospital, Chicago; Emeritus Professor of Pediatrics, Northwestern University Medical School



S. GIBSON, M.D.

9:50 "Surgical Treatment of Coarctation of the Aorta"

CAMERON HAIGHT, M.D., Ann Arbor

Professor of Surgery, University of Michigan Medical School



A. J. BOYLE, M.D.

10:10 INTERMISSION TO VIEW EXHIBITS

11:00 "A Physico-chemial Approach in the Establishment of a Test for Atherosclerosis"

ALBERT J. BOYLE, M.D., Detroit

Wayne University Professor of Chemistry; Associate Professor Experimental Medicine

11:15 "Vasoconstriction and Vasodilation in Shock"

MARK NICKERSON, M.D., Ann Arbor

Associate Professor of Pharmacology, University of Michigan School of Medicine



M. NICKERSON, M.D.



G. E. Wakerlin, M.D.

A.M.

11:35 "Pathogenesis and Treatment of Essential Hypertension"
George E. Wakerlin, M.D., Chicago, Illinois
Professor of Physiology and Head of the Department

12:00 End of Fifth Assembly

P.M.

1:00 Color television program, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Harper Hospital, Detroit, and Smith, Kline and French Laboratories of Philadelphia.

3:00 FINAL INTERMISSION TO VIEW EXHIBITS



M. H. Seevers, M.D.

SIXTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

D. A. Koch, M.D., Port Huron, *Chairman*

Four Medicine General Practice Subjects

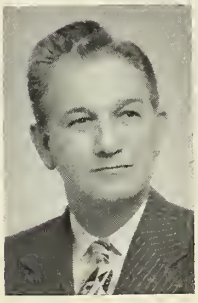
3:30 "Analgesic Drugs"
Maurice H. Seevers, M.D., Ann Arbor
Professor and Chairman, Department of Pharmacology, University of Michigan Medical School

3:50 "Use and Abuse of Newer Drugs in Dermatology"
Loren W. Shaffer, M.D., Detroit
Professor Dermatology and Syphilology, Wayne University College of Medicine



L. W. Shaffer, M.D.

4:10 "Differential Diagnosis and Treatment of Extrinsic and Intrinsic Asthma"
Stanley F. Hampton, M.D., St. Louis, Missouri
Assistant Professor of Clinical Medicine, Washington University School of Medicine



S. F. Hampton, M.D.

4:40 "Convulsive State"
H. Houston Merritt, M.D., New York, New York
Professor of Neurology, Columbia University; Director of the Service of Neurology-Neurological Institute, Presbyterian Hospital

5:10 End of Sixth Assembly



H. H. Merritt, M.D.

5:10 DISCUSSION CONFERENCE

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: K. W. Toothaker, M.D., Lansing

Participants: Albert J. Boyle, M.D., Detroit; Stanley Gibson, M.D., Chicago; Cameron Haight, M.D., Ann Arbor; Stanley F. Hampton, M.D., St. Louis; H. Houston Merritt, M.D., New York City; Mark Nickerson, M.D., Ann Arbor; Maurice H. Seevers, M.D., Ann Arbor; Loren W. Shaffer, M.D., Detroit, and George E. Wakerlin, M.D., Chicago.

6:10 End of Discussion Conference and the 1954 Michigan Clinical Institute

1954 MICHIGAN CLINICAL INSTITUTE COMMITTEE ON ARRANGEMENTS AND PROGRAM

Wilfrid Haughey, M.D., Battle Creek, *Chairman*
A. H. Miller, M.D., Gladstone, *Vice Chairman*
L. W. Hull, M.D., Detroit, *MSMS President*
R. J. Hubbell, M.D., Kalamazoo, *MSMS Immediate Past President*
L. Fernald Foster, M.D., Bay City, *Secretary*
H. H. Cummings, M.D., Ann Arbor, *Advisor*
J. Milton Robb, M.D., Detroit, *Advisor*
Representing Michigan State Medical Society

* * *

John Alexander, M.D., Ann Arbor
Fred A. Coller, M.D., Ann Arbor
F. Bruce Fralick, M.D., Ann Arbor
J. M. Sheldon, M.D., Ann Arbor
H. A. Towsley, M.D., Ann Arbor
Representing University of Michigan School of Medicine and University of Michigan Department of Postgraduate Medicine

* * *

E. H. Fenton, M.D., Detroit
G. C. Penberthy, M.D., Detroit
W. S. Reveno, M.D., Detroit
E. D. Spalding, M.D.,* Detroit
Representing Wayne University College of Medicine and Wayne County Medical Society

* * *

W. J. Butler, M.D., St. Joseph
K. L. Crawford, M.D., Kalamazoo
R. E. Fisher, M.D., Bay City
D. A. Koch, M.D., Port Huron
R. W. Pomeroy, M.D., Lansing
F. H. Power, M.D., Traverse City
D. S. Smith, M.D., Pontiac
W. H. Steffensen, M.D., Grand Rapids
Representing Out-State Practitioners, members of the MSMS

* * *

A. E. Heustis, M.D., Lansing
V. N. Slee, M.D., Hastings
Representing Michigan Department of Health and Michigan Health Officers Association

* * *

E. I. Carr, M.D., Lansing
Representing the Michigan Foundation for Medical & Health Education, Inc.

* * *

W. B. Cooksey, M.D., Detroit
Representing the Michigan Heart Association

* * *

*Deceased, November 30, 1953.

ANAPHYLACTOID REACTION FOLLOWING USE OF A PENICILLIN LOZENGE

(Continued from Page 61)

quate to produce a systemic reaction in this patient (this is 0.025 per cent of the normal intramuscular dose). That this reaction was due to the crystalline penicillin G and not any other component of the lozenge was shown by the addition of the penicillinase.

The use of penicillinase as was done here can possibly be used to good advantage in skin testing of penicillin preparations to rule out sensitivity to other ingredients in the preparation as well as the vehicle.

The widespread practice of using penicillin lozenges for upper respiratory infections is one which is admittedly fraught with dangers of sensitization. To date, no other anaphylactoid reactions from the use of penicillin lozenges have been reported in the medical literature. In most states, no prescription is required to purchase this drug in the form of lozenges. With this common usage of penicillin, more and more severe reactions as described here will in all likelihood be seen, and it would be wise for the man in practice to be on the lookout for them.

Reference

1. Thomson, W. O.: Fatal allergic reaction to penicillin. Brit. M. J. (July 12) 1952.

CYSTOSARCOMA OF BREAST

(Continued from Page 74)

3. Desawe, P.: Giant intracanalicular fibroadenomyxoma of the breast, Phylloid type of John Meuller. Liege—Medical, 32:175 (Mar.), 1939.

4. Horton, C. E., and Baker, J. M.: Cystosarcoma phyllodes. Am. J. Surg., 80:896 (Dec.) 1950.

5. Lee, B. J., and Pack, G. T.: Giant intracanalicular fibroadenomyxoma of the breast—cystosarcoma phyllodes manual of Johannes Meuller. Averecan Journal of Cancer, 15:2583-2609 (Oct.) 1931.

6. Lee, B. J., and Pack, G. T.: Giant intracanalicular myxoma of breast. Ann. Surg., 93:250, 1931.

7. Preston, John C.: Cystosarcomatoid phyllodes. Delaware State M. J., 22:296 (Oct.) 1950.

8. Ross, Donald E.: Cystosarcoma phyllodes. (giant intracanalicular myxoma.) Am. J. Surg., 1:728-733 (Dec.) 1952.

John M. Sheldon, M.D.

President, American Academy of Allergy

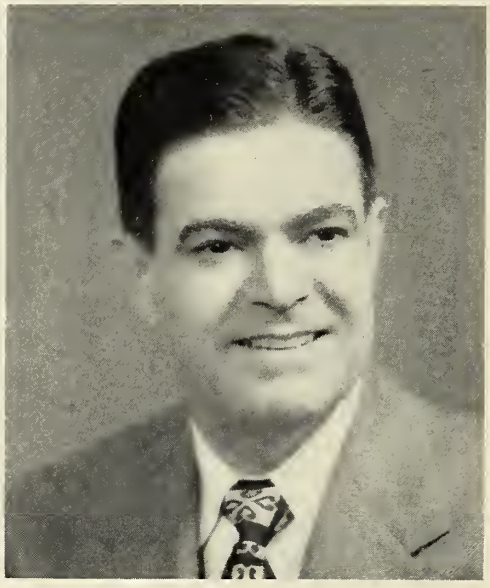
With Dr. John Sheldon, you don't go back to the beginning. You start with him where he is. That's because with John Sheldon you immediately feel that here's a fellow whose background, family, training, likes and dislikes all come out in the immediate presentation of the man.

Lest that sound like an underhanded compliment (no one likes to be thought of as simple these days), imagine the following situation:

The University of Michigan Out-patient Clinic is a multi-million dollar medical monument to efficiency. There is little wasted motion, less wasted space in this new adjunct to the University Hospital.

The magazines all are up to-date. The furniture contemporary. And the receptionists attractive.

The only trouble is that the patient, who for a long period of his life has been treated by his family physician, is likely to experience a feeling of indifference to his personal requirements, not the least of which is a friendly appreciation of what he is going through emotionally.



John M. Sheldon, M.D.

As I sat waiting for Dr. Sheldon to finish with his last patient one afternoon, I strained to catch a bit of conversation.

"Say, when are you going to get well? I think it's about time we get down to the bottom of this trouble once and for all!"

That was Dr. John M. Sheldon, University of Michigan professor of internal medicine, assistant to the chairman of the Department of Postgraduate Training Program, allergist in the Health Service, and managing editor of the *University of Michigan Medical Bulletin,* speaking. And he was speaking to the patient of one of his departmental associates.

John Sheldon knew the patient, felt his anxiety, and felt no compunction about thawing the atmosphere of its professional objectivity.

I sat waiting in Dr. Sheldon's private office fifteen minutes, a half hour, forty-five minutes, when suddenly he burst in with, "I'm sorry. I'll bet you're hungry." It was almost six o'clock.

"Oh, that's all right," I replied half-heartedly.

"No it isn't. You're just as busy as I am."

That's what I mean: you start with Dr. John Sheldon where he is, not way back there in the analytical past.

Another example: Above Dr. Sheldon's handsome contemporary desk hangs a mobile. One of those modern art objects suspended mid-air, resembling a combination of gypsy ear-rings and a tinsmith's scrap collection.

I thought, "Here's a significant clue to the personality."

"I'm curious about the presence of that mobile, Dr. Sheldon. How come?"

"You're a discerning reporter," he replied, through a shy smile. "Well, Mrs. Sheldon and I like children very much (they have none), and I've found that the youngsters who visit my office are very much intrigued with that mobile."

I glossed over the fact that the mobile had a similar effect on me and asked, "In other words, it has no particular aesthetic significance to you as an art object?"

"None at all. I just like it, and so do the kids."

You've just met Dr. Sheldon, and if you are at all interested in people, you've found him to be prepossessing, friendly, and above all, comfortable. I wondered how to describe Dr. Sheldon in a

A dinner honoring the President of the American Academy of Allergy, John M. Sheldon, M.D., will be held at the Sheraton-Cadillac Hotel, Detroit, on Friday, March 12, 1954, at 6:30 p.m.

manner befitting a professional journal. Being a firm believer that a writer's style should be pretty much determined by the nature of the subject, I wondered, "Will they like it if I just say, John Sheldon is a nice guy?"

Because that's it: John Sheldon is a nice guy.

But there is also something of a paradox in the man who quickly is achieving stature as one of the country's outstanding allergists. Born in Percival, Iowa, John Sheldon looks like a Madison Avenue advertising executive. Schooled at the University of Nebraska, where he received his Bachelor of Science and medical degrees, Dr. Sheldon comes very close in appearance to the Ivy League prototype. Quartered in a contemporary atmosphere—mobile and all—he keeps an old-world wood carving of "Allergie Artz" on his windowsill.

At first I thought "Allergie Artz," which is a 4-inch wood statuette of a white-coated European physician stroking his beard quizzically, was very much out of place in the picture I saw. How does one put a wood carving and a hand-tooled leather cigarette lighter together and come out with a whole man?

Dr. Sheldon himself explained by what he said.

"My Dad, the town minister, a lawyer, and the family physician exerted a tremendous influence on my life," Dr. Sheldon admitted.

Admitted, I say, because these seem to be days when people prefer to imitate abstract principles rather than reveal their affection and admiration for real live mentors.

Not so Dr. Sheldon. The principles of fair play, professional integrity, impeccable scientific standards, and love for the individual—these can be mouthed by the sophisticate, but their real existence is found in people who live their principles instead of vaguely talk about them.

This I took as a clue to the paradox in John Sheldon. On the surface I found him to be suave, well-groomed, modern. Like the contemporary desk, the hand-tooled leather lighter, the mobile. But underneath, I found signs of an Iowan youngster looking with admiration on his Dad as the two of them went fishing. I saw signs of the homespun, exemplified by Dr. Sheldon's affection for the rough texture of the wooden statuette. And in a single remark, I collected the doctor's philosophy of medical education, undoubtedly reflecting the awe with which the younger Sheldon viewed the family physician.

"Even if I were given the wisdom and power to reorganize medical education, I don't think I'd change it very much. I would like, however, to see more of the proctorship idea, giving the young medical student closer contact with his chief."

It takes a pretty sentient man to preserve professional dignity without sacrificing personal intimacy with patients. It takes a great deal of skill to combine charm with honesty. It takes almost incredible versatility to be modern without being moderne. And it takes a great deal of generosity to tolerate a biographer's intrusions when there is more important work to be done.

This is Dr. John Sheldon. A real nice guy.

L.G.

MEDICAL PUBLIC RELATIONS

(Continued from Page 81)

sections of the state have not been entirely co-operative. Some of them made it a practice to add extra charges to many of their patients, over and above the payments made available from the Service plan. This made troubles and difficulties for Blue Shield. The gripes coming to us were not of misunderstanding of charges. These doctors all had an understanding with their patients. The people complained that the insurance did not cover all charges.

This points up just one thing which has been advocated. Most of our doctors always talk with their patients or their families, especially before surgical treatment, telling them exactly what it will cost. This protects the doctor from any possible misunderstanding, and assures the co-operation of all concerned—the doctor who does the work, the patient who pays, and the insurance carrier. A friendly understanding insures satisfaction on all sides. Why not have every doctor try it? Labor is advising its people to "make a deal" with the doctor. That will work both ways, and to everybody's advantage.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

NEW PLAN OF ANIMAL DISEASE REPORTING

In line with the current emphasis on the many diseases of animals which are transmissible to man, the Michigan Department of Health has entered into a co-operative program with other interested agencies and organizations for the development and operation of an Animal Morbidity Reporting system.

Under the new system, practicing veterinarians will receive franked self-addressed cards about the 15th and 30th of each month, on which they will record the communicable diseases of animals which they have seen during the preceding two weeks. These cards will be returned to the Michigan Department of Health where the information will be tabulated. At the end of each month a report, including a summary of the tabulated data and pertinent information regarding current animal disease activities, will be sent to each practicing veterinarian, as well as to all of the local health departments in the state and to other interested groups and individuals.

The information gained from such a reporting activity will be of value to public health organizations in the control of diseases of animal origin. The information will also be of considerable assistance in the control of diseases of economic significance and will be useful in the event of biological warfare attack upon the animal population of this country.

SOME HIGHLIGHTS OF 1953

The year 1953 saw more babies born than during any other year in the state's history and a general death rate and a maternal mortality rate that set new low records. The infant death rate remained about the same, rising slightly from 26.1 in 1952 to 26.4 in 1953.

The only disease termed epidemic in the state during 1953 was poliomyelitis. The approximately 2,500 cases reported was a better record than the 3,909 of 1952 but still marked the third worst polio year in the state's history. It was also the first year in which gamma globulin was distributed for use in the prevention or modification of paralytic manifestations of polio.

Tuberculosis deaths continued to decline in 1953. If the estimate of a 65 per cent drop proves accurate, it will mean that the death rate from this disease has gone down 75 per cent in the last ten years. However, the number of newly reported cases remains about the same, emphasizing the need for a stepped-up case-finding program if real progress is to be made against this disease.

Diagnostic tests performed in the department's division of laboratories reached 1,295,279, highest in the division's history. An estimated 3,032,399 doses of serums and vaccines were produced and distributed during the year.

As a result of the wide use of antibiotics, there has been an increasing demand for bacteriological determination of a type of infecting agent and its sensitivity to specific antibiotics.

The Blood and Blood Derivatives Program has provided blood plasma, albumin, immune serum globulin, antihemophilic globulin and resuspended cells to 64 counties in the state. These products are manufactured from human whole blood or blood plasma, the whole blood for this use being collected by the laboratories special field unit. The department has continued to be the only agency in the country producing antihemophilic globulin. A noteworthy event of the year was the development of a method for the production of gamma globulin and other fractions from human placentas.

Major interest in local health administration has been centered upon progress in the combination of counties to secure a broader tax and population base to assure more effective services.

Interest in child health continued high. Reports to the department show that 651 child health conference sessions were held in thirty-nine communities, with fifty-two practicing physicians taking part. Classes for expectant parents were conducted in twenty-three counties. The department's five hearing consultants worked in thirty-two counties on co-operative hearing conservation programs that screened 170,000 school children. Through the co-operation of seventy practicing otologists, 2,250 children received otological examinations as a follow-up of this intensive case finding.

A significant development in the department's expanding program in occupational health was an adult health screening program sponsored jointly by a local health department and the Michigan Department of Health. The series of screening tests was offered to a group of employees in an interested industry, with some 90 per cent of the employees participating. One objective of the program was to try to evaluate chronic disease screening methods which might be applied either in mass screening programs or by practicing physicians in their offices.

Fluoridation of public water supplies received added impetus in 1953, with eight communities added to the list of those giving this protection to children. This brings to 41 the number of communities fluoridating their supplies, which serve a population of 900,000.

Heart disease, cancer and apoplexy continued to lead as causes of death in Michigan in 1953, with accidents in fourth place. More than half of all deaths, 52 per cent, occurred at age sixty-five or over.

If physicians would become pessimistic instead of optimistic about the chances of their patients having cancer, much more would be accomplished than by the further development and use of extensive radical surgical technique or the construction of more powerful x-ray therapy units.

Carcinoma of the esophagus, stomach and colon accounts for 50 per cent of the cancer mortality in men and 40 per cent in women.

The Problem of Nausea and Vomiting:

ITS TREATMENT WITH DRAMAMINE®

Whenever nausea, vomiting and vertigo are disturbing and complicating factors, Dramamine may be used with confidence.

Keats[1] outlines the wide list of conditions in which Dramamine (brand of dimenhydrinate) has proved valuable as follows: "It has been well established in the control of motion sickness. It has been used effectively in the prevention and treatment of seasickness, airsickness, [in the treatment of] the nausea of pregnancy, Ménière's syndrome, . . . radiation sickness . . . and postfenestration reactions. . . . The site of action is imperfectly understood, but there is indication of an action of depressing labyrinthine function or its neural pathways, a highly selective central action, or both. Few side reactions of this drug have been noted."

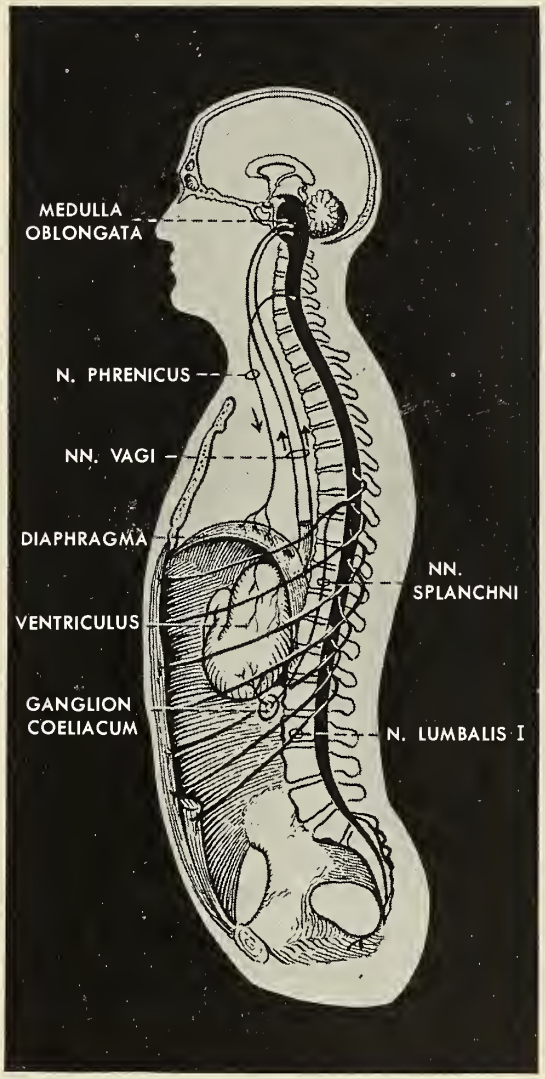
The usual dose for motion sickness is 50 mg. (one tablet) taken one-half hour before departure and, if necessary, before meals for the duration of the journey. Control of nausea and vomiting of other conditions and severe motion sickness is achieved, with minimal drowsiness, by a dosage of 100 mg. every four hours.

"[Dramamine] is administered orally or rectally. . . . The same doses may be administered rectally by insertion of the tablet or other suitable form. . . ."[2]

Dramamine Liquid is particularly useful for children.

Dramamine is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

1. Keats, S.: Ataxic Cerebral Palsy with Akinetic Seizures: Dramatic Response to Dramamine, J. M. Soc. New Jersey *50*:53 (Feb.) 1953.
2. Council on Pharmacy and Chemistry: New and Nonofficial Remedies, 1953, Philadelphia, J. B. Lippincott Company, 1953, p. 471.



THE VOMITING REFLEX: *Vagus→ nodose ganglion→ solitary tract→ spinal cord→ cervical, thoracic and lumbar nerves to diaphragm, cardiac sphincter, stomach, abdominal and pelvic musculature. (After Krieg, W. J. S.: Functional Neuroanatomy, ed. 2, New York, The Blakiston Company, Inc., 1953, p. 104.)*

SEARLE *Research in the Service of Medicine*

In Memoriam



E. E. SPALDING, M.D., who was fatally shot November 30 by a deranged assassin, was mourned by Michigan's entire medical profession who were shocked and saddened by the news. Dr. Spalding died on the sidewalk outside the Professional Building, Detroit, where he had his offices, as he left for the AMA Clinical Session in St. Louis, Missouri.

Dr. Spalding, sixty years old, was the immediate Past President of the Wayne County Medical Society and MSMS' first Alternate Delegate to the AMA House of Delegates. At the time of his death, he was chief of the Department of Medicine at Harper Hospital, where he had been a staff member since 1921, and Professor of Clinical Medicine at Wayne University.

For years, Dr. Spalding had been active in many medical organizations. He was a member of the Detroit Academy of Medicine, Detroit Medical Club, and the American College of Physicians. He held certification from the American Board of Internal Medicine and its sub-board in cardiology.

Dr. Spalding was born in Detroit only a few blocks from the spot where he died. He attended Detroit University School, and was graduated from Princeton University in 1914 where he won membership in Phi Beta Kappa. He received his M.D. degree from Johns Hopkins University in 1918 while serving overseas in World War I with a medical unit formed at the University during his senior year. Dr. Spalding served his internship at Baltimore City Hospital, and took a residency in medicine at New Haven General Hospital.

During World War II, he served with the Harper Hospital unit as Chief of Medicine, with duty in Casablanca, Oran, and Naples. Later in the war, Dr. Spalding, who attained the rank of colonel, was medical consultant to the Fifth Army.

Dr. Spalding was possessed of a brilliant mind and numbered among his hobbies advanced methematics, astronomy, and nuclear physics. He reputedly was one of the few men in Michigan who understood the Einstein theory. He also had an amazing knowledge of parliamentary law.

Outspoken, and a master of debate, Dr. Spalding was admired by his colleagues for the manner in which he stood by anything he considered a matter of principle.

Dr. Spalding is survived by his wife, Melody; two daughters, Mrs. Florence Sharp of Rockford, Illinois, and Harriet, a student at Wellesley, and a son, Edward, an army sergeant serving in Germany.

JAMES D. COLLINS, M.D., who had practiced in Detroit since 1926, died at his home November 16, 1953, at the age of sixty-six.

Doctor Collins was a native of London, Ontario. He was graduated from Western Ontario Medical School in 1910, and interned at St. Joseph's Hospital, London.

Surviving are his widow, Gertrude; a son, James E. Collins, M.D., of Detroit; two daughters, Mrs. Joseph Marshall and Mrs. Arthur F. Parker, and a granddaughter.



OLIVER R. MACKENZIE, M.D., of Walled Lake, president of the Oakland County Medical Society, died September 17, 1953, in Mt. Clemens, of injuries received in an automobile accident. He was forty-four years old.

A native of Escanaba and a graduate of Marquette University, Dr. MacKenzie had practiced medicine in Walled Lake for the last fifteen years. On the day of his death, he was to have left for a year of special study in internal medicine at the University of Pennsylvania.

In 1952, in recognition of Dr. MacKenzie's contribution to medical work in local schools, the Walled Lake Rotary Club named him "Citizen of the Year."

Surviving are his wife, Marion; two daughters, Mary Kay and Jane Ann, and his mother.

ROBERT J. JERMSTAD, M.D., Flint, died October 15, 1953, in Battle Creek, of injuries received eight days earlier in an automobile accident. He was forty-five years old.

Dr. Jermstad was staff pathologist for the three major hospitals in Flint and was a partner in the Flint Medical Laboratory. He moved to Flint in 1945 from Ft. Wayne, Indiana.

Born in Duluth, Minnesota, Dr. Jermstad held degrees from St. Olaf College and the University of South Dakota. He was a graduate of Rush Medical College, Chicago, and served his internship at Charleston General Hospital, Charleston, West Virginia. Later, he served as instructor in pathology at George Washington University Medical School and as a pathologist in hospitals at St. Louis, Missouri, and Fort Worth, Texas.

During early World War II, he was an officer in the Army Medical Corps, receiving an honorable discharge in 1942. Later, he became a member of the Naval Reserve Medical Corps, and gained the rank of Lieutenant Commander.

(Continued on Page 98)

Meat...

and Its Place in the Diet in Hypertension

Contrary to the concept that protein intake contributes to the genesis of hypertension and should be drastically reduced in therapy[1, 2, 3] adequate protein nutrition today is considered essential for preserving maximal vigor and a sense of well-being in the hypertensive patient.[3] Meat, once thought to be contraindicated, now is recognized as an important protein food in the dietary regimen in hypertension.

High-protein foods do not elevate arterial tension — neither in the hypertensive nor the normotensive person. Nor does the specific dynamic action of protein make undue demands on the heart.[2, 3, 4] Only in advanced hypertension when renal function is seriously impaired, or in cardiac emergency episodes, when cardiac disease complicates hypertension, is restriction of protein intake below the normal allowance of 60 to 70 Gm. per day justifiable.[2, 3]

But not only for its high content of biologically top-quality protein is meat a recommended daily food in the diet of the hypertensive patient. It also goes far toward satisfying the needs for essential B vitamins and minerals. Another important feature of meat is its outstanding taste appeal and its virtually complete digestibility.

---

1. Wilhelmj, C. M.; McDonough, J., and McCarthy, H. H.: Nutrition and Blood Pressure, Am. J. Digest. Dis. *20*:117 (May) 1953.
2. Mann, G. V., and Stare, F. J.: Nutritional Needs in Illness and Disease, J.A.M.A. *142*:409 (Feb. 11) 1950.
3. McLester, J. S., and Darby, W. J.: Nutrition and Diets in Health and Disease, ed. 6, Philadelphia, W. B. Saunders Company, 1952, pp. 519-524.
4. Levine, V. E.: The Blood Pressure of the Eskimo, Federation Proc. *1*:121 (Mar. 16) 1942.

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ROBERT J. JERMSTAD

(Continued from Page 96)

Dr. Jermstad was certified by the American Board of Pathology, and was a fellow of the College of American Pathologists and the American Society of Clinical Pathology.

Surving are his wife, Lorine, and two sons, Robert, Jr., and Glen, both midshipmen at the U. S. Naval Academy, Annapolis, Maryland.

DANIEL B. MARCUS, M.D., of Detroit, died September 26, 1953, at the age of forty-five.

Dr. Marcus was on the staff of Grace Hospital, where he also served his internship. A native of Detroit, he was a graduate of Wayne University College of Medicine in 1931. Dr. Marcus was a member of the American Diabetic Association.

He is survived by his wife, Rose, and parents, Mr. and Mrs. Leon Marcus of Detroit.

BRYAN TROMBLEY, M.D., of Grosse Pointe, died September 15, 1953, at Santa Barbara, California, where he had been visiting.

Dr. Trombley, fifty-seven, had been chief examiner for the department of street railways in Detroit for twenty-five years. He attended the University of Michigan and was a graduate of the Detroit College of Medicine and Surgery.

He is survived by his wife, Wilma; two daughters, Mrs. Leonard Winter, and Marianne; a brother, Joseph Trombley, Jr., M.D., and a granddaughter.

GORDON H. YEO, M.D., Big Rapid's oldest practicing physician, died September 15, 1953, at the age of sixty-six.

Dr. Yeo was a native of Big Rapids and attended public school there before entering the University of Michigan. He was graduated from the University of Michigan School of Medicine in 1912. He served an internship in Calumet, Michigan. From there, he went to the Santa Tomas Hospital in Panama for one year, returning to practice in Barryton, Michigan, for a period, before finally settling in Big Rapids.

During World War I, Dr. Yeo served in the Army Medical Corps, later returning to Big Rapids to resume his practice of medicine. Later, in 1926, he studied abroad in Austria, Switzerland, and France.

Dr. Yeo was a member of the Alpha Kappa Kappa fraternity, University of Michigan Chapter; American Legion, Harry Kunze Post 98; 40 plus 8 Club; Big Rapids Board of Education; and also a member of the Board of Trustees of Ferris Institute.

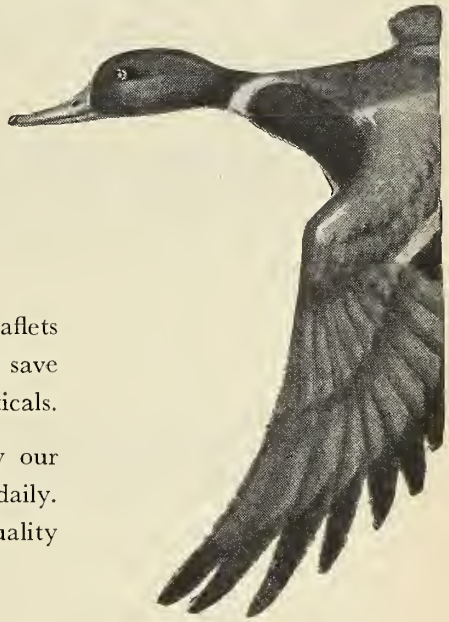
Surviving Dr. Yeo are his wife, Ernestine; a son, Gordon, a naval officer, Schenectady, New York; a daughter, Ernestine, Grand Rapids; and a brother, Russell, Big Rapids. There are two grandchildren.





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WRITE TODAY

Correspondence

Dear Wilfrid:

We are enclosing a copy of the Attorney General's Opinion on the Civil Service classification, Medical Technician III.

Our own graduates, native sons and daughters, must have a license to practice medicine and yet under the guise of a Civil Service classification, we are allowing those who are not even citizens to violate the law. This practice certainly is not consistent with the policy of this Board, and we are in hopes that this Opinion will clarify and remedy the situation without necessitating any legal action.

Therefore, we are calling on you for a little help in bringing this to the attention of those involved through the medium of your publication. We'll appreciate anything you may wish to publish to help us clear up this situation without any further unpleasantness.

Yours truly,

J. Earl McIntyre, M.D.,
Executive Secretary
Michigan State Board of Registration

Lansing, Michigan
November 12, 1953

* * *

J. Earl McIntyre, M.D., Secretary
State Board of Registration in Medicine

Dear Dr. McIntyre:

You have submitted to me a copy of Statement No. 61016, issued by the Civil Service Commission, setting forth the qualifications for appointments and duties of a Medical Technician III.

Among the duties listed, which are to be performed "under the direct supervision of a ward or staff physician," are the following:

"Makes routine physical and mental examinations of patients.

Makes daily rounds of assigned wards.

Assists with medical treatments and surgery.

Assists in performing autopsies and pathological services.

Dictates progress reports on post-operative and medical patients.

Attends diagnostic staff meetings and participates in the discussion."

You have asked whether any of the foregoing services would be within the definition of the practice of medicine as set forth in Act No. 237, Public Acts of 1899, as amended.

You also state that the question arises as to whether hospitals and employing foreign unlicensed doctors "are seeking to circumvent the provisions of the statute as to medical licensure under the aegis of civil service protection, and more important, whether the physician associating with such unlicensed employee in his medical activities, is violating the provision of the statute prohibiting such associations."

I understand that your investigation has disclosed that these foreign doctors are definitely doing the same work as resident physicians who have to have at least a temporary license; and that medical technicians sign charts which are a permanent part of the hospital file; that they sign dismissals; that there is no organized training program or instruction at most hospitals for training resident physicians, and that many doctors believe that the duties prescribed in this Civil Service Statement constitute the practice of medicine.

Section 9 of Act No. 237, Public Acts of 1899, as amended, Mich. Stat. Ann., Sec. 14.539, defines "practice of medicine" as meaning "the actual diagnosing, curing or

Say you saw it in the Journal of the Michigan State Medical Society

relieving in any degree, or professing or attempting to diagnose, treat, cure or relieve any human disease, ailment, defect, or complaint, whether of physical or mental origin, by attendance or by advice, or by prescribing or furnishing any drug, medicine, appliance, manipulation or method, or by any therapeutic agent whatsoever."

The medical practice act requires that anyone practicing medicine within the definition above quoted must be licensed, and there is no exception in said act for those who might be practicing under the supervision of a licensed physician.

Whether a medical technician is practicing medicine is a question of fact. If the technician could perform the above stated duties without violating the act, the said duties would not be within the definition of "practice of medicine." Your board would be best qualified to determine whether the duties performed constitute the practice of medicine. Civil Service prescription could not contravene the medical act.

Yours very truly,
FRANK G. MILLARD
Attorney General
By ARTHUR T. IVERSON
November 5, 1953 *Deputy Attorney General*

EXAMINATIONS

October 15, 16, 17, 1952

Lansing:	Primary 34	Final 33

June 10, 11, 12, 1953

Detroit:	Primary 82	Final 82
Ann Arbor:	Primary 145	Final 147

EXAMINATION AVERAGES

October 15, 16, 17, 1952
Lansing

University of Michigan	83.74%
Wayne University	81.20%
Out-of-State Medical Schools	84.66%
Foreign Graduates	76.20%

June 10, 11, 12, 1953
Ann Arbor and Detroit

University of Michigan	84.09%
Wayne University	81.80%
Out-of-State	83.89%
Foreign Graduates	81.97%

J. EARL MCINTYRE, M.D.
Executive Secretary

* * *

Dear Dr. Haughey:

This year our fourteenth annual Parent Institute—Nursery School of the Michigan School for the Deaf will be held March 28 through April 3, 1954, on our campus.

We are enclosing a copy of the Preliminary Announcement and our General Announcement bulletin. Dr. Jon Eisenson, director of the Speech Clinic at Queens College in New York, will be the banquet speaker this year. He will speak on the subject of *Speech—Its Development and Functions in the Child* (Copy on request).

We would like this information to reach as many interested people as possible and would appreciate it if you would make an announcement of this in your January or February issue of the *Michigan State Medical Journal.*

Your assistance will be appreciated.

Sincerely yours,
(Mrs.) Grace Schurr Poulos
Field Representative
Michigan School for the Deaf

Flint, Michigan
November 5, 1953



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Dr. L. Fernald Foster, Secretary
Michigan State Medical Society

Dear Doctor Foster:

It occurred to me that you might like to know of some of my activity in travelling about the State in the interests of medical education.

During the last four years I have reached practically all the colleges in the State, and I believe that now the appropriate persons are fairly well informed in those schools in regard to the facts about preparation for and admission to the medical schools. A year ago I visited high schools and college campuses for the first time in the Upper Peninsula. I learned that there is a great deal of misinformation, some of it apparently malicious, in regard to medical school. I believe that my presence in some of those schools and my conversations with some of the school men may have been beneficial.

Within the past two weeks I have visited about twenty high schools in the upper part of the Lower Peninsula. I also contacted many more school officials by means of meetings in conjunction with public school teachers meetings at Mt. Pleasant and Alpena. I spoke to two Rotary Clubs and enjoyed brief visits with physicians in several localities. My chief purpose was to ask the school people to encourage the proper youngster—at least not discourage—in his thinking of the medical profession.

Apparently misinformation and rumors have led teachers from time to time to discourage those who might be aspiring to medicine. The more important of these bits of misinformation are as follows:

1. That only one of ten or twenty applicants to Medical Schools are admitted. As a matter of fact the greatest disparity between applicants and places was 4.7 to 1 four or five years ago. This year the medical schools are accepting approximately one-half of the applicants. Of those who are not accepted, some will undoubtedly be admitted the following year, and most of the others probably should not be in medicine anyway. Very few properly qualified applicants to the University of Michigan Medical School were denied admission this past year.
2. That thirty or forty per cent of the medical students are flunked out. The mortality of medical students from enrollment as freshmen to graduation is approximately ten per cent throughout the United States. At the University of Michigan we are currently losing fewer than that. Academic failure in this school, because of low intellectual capacity, is exceedingly slight. Most of the losses are withdrawals because of lack of motivation, or a failure of physical or mental health.
3. That organized medicine restricts the size of medical schools in order to keep down the number of practitioners and thus competition. I have been glad to say at every opportunity that the Michigan State Medical Society had urged the two medical schools to enlarge and had urged the Legislature to furnish the facilities for that enlargement. The activities of the American Medical Association's Council on Medical Education in assisting in the start of new medical schools, is also cited.
4. That an applicant has to be the son of a doctor or have political and professional influence to be admitted to medical school. Only twenty-one graduates of the 1953 class of 139 were sons or daughters of doctors. Very little so-called "pressure" comes to the Admissions Committee of the Medical School. It is strongly resisted by the Admissions Committee, for this school is looking for those who give the best promise of becoming the most useful physicians.
5. The medical schools favor the admission of applicants from the large cities. This attitude is of course prevalent in upstate areas. My answer to

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that has been that it hasn't been a matter of favoritism that more are accepted from the cities in proportion to population than from the smaller communities. This is due to the fact that there are relatively few applicants from the small communities. The purpose of my visit in those areas of the State was to call that to the attention of responsible persons, and to suggest that one of the best means of increasing the supply of physicians in the small towns is to provide the applicants from those areas.

The increasing concern about the means of financing a medical education by many good students is apparent, both at the high school and college level, and in the medical school itself. Though the University has a small amount of funds for financial assistance to needy medical students, it is recognized that the primary responsibility lies with the student. If his family cannot give him adequate support, others in the community may do so. After concurring with a few physicians individually and the discovery that many of them are personally supporting students in medical school, I suggest from time to time that students approach physician friends for advice on where to borrow money to complete their medical education. This approach has been quite fruitful, and it may be found advisable to consider a more extensive use of this suggestion.

It seems to me that the visits I had with the school people and others in the several communities, have been successful. At least I personally enjoyed the opportunity of presenting facts to combat current false rumors.

Sincerely yours,

Wayne L. Whitaker
Assistant Dean, University of Michigan Medical School, Ann Arbor

October 12, 1953

"JUMPING THE GUN"

To the Editor:

It has been brought to the attention of the Board that some residents and interns are "jumping the gun"; in other words, they are taking night and Sunday calls and generally assisting private practitioners during their off-duty hours outside the hospital.

This is in direct violation of the Medical Practice Laws of Michigan.

It is not necessary for an intern to have a license for training purposes; however, he is still subject to the rules and regulations set forth by the Board and by statute. An intern may not practice without the confines of the hospital in which he is serving his internship.

The resident or assistant resident has been given a temporary license for his postgraduate training within the hospital to which he has been assigned only. The temporary license does not allow for the practice of medicine without the confines of the hospital, nor does it allow for assisting a private practitioner which constitutes the practice of medicine without licensure even though in the capacity of an assistant.

The Medical Practice Laws are for the protection of you, the doctor, as well as the public and certainly it is worth our while to abide by them.

Michigan State Board of Registration in Medicine

J. Earl McIntyre, M.D.
Secretary

What evidence there is does not indicate that the patient with a cancer of the esophagus, stomach or colon has a definite diagnosis made any earlier in the course of his tumor than he did twenty years ago.



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MICHIGAN CLINICAL INSTITUTE
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MICHIGAN AUTHORS

Bruce D. Graham, M.D., and **George H. Lowrey, M.D.,** Ann Arbor, are the authors of an article entitled "Chemical Findings in Infants Born of Diabetic Mothers: A Preliminary Report" published in *University of Michigan Medical Bulletin,* October, 1953.

Daniel C. Hunter, Jr., M.D. and **Hodge N. Crabtree, M.D.,** are authors of an article entitled "Carcinoma of the Thyroid: Factors in Prognosis and Therapy" published in *University of Michigan Medical Bulletin,* October, 1953. This is an abstract of an article presented by Dr. Crabtree at the tenth annual meeting of the Central Surgical Association in March, 1953, and published in the *Archives of Surgery,* 67:175-186, 1953.

Carey P. McCord, M.D., Ann Arbor, is the author of an article entitled "Lead and Lead Poisoning in Early America," published in *Industrial Medicine and Surgery,* November, 1953. This is the second of a series of nine items appearing in consecutive issues of this journal.

Alexander Blain III, M.D., Nester A. Flores, M.D., and **Francis Gerbasi, M.D.,** are authors of an article entitled "Present Status of Peripheral Neurectomy For Pain in Obliterative Arterial Disease" published in *Journal of the American Geriatrics Society.*

Harry C. Saltzstein, M.D., Murray S. Mahlin, M.D., and **Schayel R. Scheinberg, M.D.,** are authors of an article entitled "Bleeding Peptic Ulcer" published in *Archives of Surgery,* July, 1953, and reprinted in *Current Medical Digest,* November, 1953.

Z. F. Endress, M.D., (Oakland County) is the author of an article entitled "Traumatic Mediastinal Hematoma" published in the *American Journal of Roentgenology, Radium Therapy and Nuclear Medicine,* October, 1953.

M. J. Steinhardt, M.D., and **G. S. Fisher, M.D.,** Detroit, are authors of an article entitled "Cold Urticaria and Purpura as Allergic Aspects of Cryoglobulinemia," published in *The Journal of Allergy,* St. Louis. July, 1953.

Samuel J. Levin, M.D., F.A.C.A., Detroit, is the author of an article entitled "Acth in Gelatin Clinical Results with Repository Adrenocorticotropic Hormone in Allergic Diseases," published in *Annuals of Allergy,* March-April, 1953.

Charles S. Stevenson, M.D., Detroit, is the author of an article entitled "The Diagnosis of Occult Ectopic Pregnancy" presented as the Oration in Surgery, annual meeting of the Illinois State Medical Society, Chicago, May 21, 1953, and published in *The Journal of the Illinois Medical Society,* November, 1953.

Ralph F. Turner, East Lansing, Michigan, is the author of an article entitled "The Role of the Police Scientist in a Medical Legal Investigation" published in the *Illinois Medical Journal,* November, 1953.

B. A. Getting, M.D., Ann Arbor, is the author of an original article "The Family Physician and the Public Health Department" which appeared in JAMA of September 26.

* * *

The 82nd Annual Meeting of the American Public Health Association is scheduled for Buffalo, New York, October 11-15, 1954.

* * *

The Fifth Annual International Group of Doctors in Alcoholics Anonymous will meet May 14-15-16, 1954, at the Mayflower Hotel, Akron, Ohio. For information and reservations, write Doctors, Mayflower Hotel, Akron, Ohio.

* * *

More than $100,000 has been allocated by the Michigan Heart Association for heart research studies during the current fiscal year.

* * *

Division of Hospital Facilities, FSA, reports that as of November 13, 1953, the following new projects had been approved for Hill-Burton grants in the state of Michigan:

Completed and in operation: 35 projects at a total cost of $33,085,443, including federal contribution of $12,292,815 and supplying 2,024 additional beds.

Under construction: 17 projects at a total cost of $14,549,819, including federal contribution of $5,121,072 and designed to supply 673 additional beds.

Approved but not yet under construction: 1 project at a total cost of $3,461,000, including $800,000 federal contribution and designed to supply 225 additional beds.

* * *

A general construction contract in the amount of $587,450 has been awarded by the Veterans Administration for the conversion of part of the VA Hospital at Dearborn, Michigan, to the care of tuberculous veterans.



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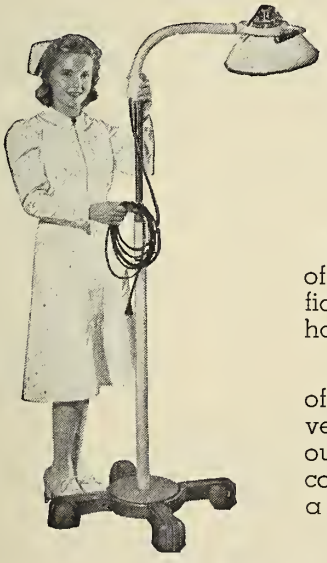
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* * *

The Cardiovascular Surgeons' Club met Friday, November 20, in Detroit. The morning program consisted of an operative clinic at Henry Ford Hospital by Conrad R. Lam, M.D.: "Aortic Dilatation"; Emerick Szilagyi, M.D.: "Aortic Graft"; Leo Kenney, M.D.: "Mitral Commissurotomy."

Inspection of the Henry Ford Hospital Blood Vessel Bank and visit to the Laboratory of Experimental Surgery, preceded the luncheon served by courtesy of the Surgical Staff of the Hospital.

In the afternoon, case presentations were given at Alexander Blain Hospital on Portal Hypertension: Joseph A. Witter, M.D. and Kenneth N. Campbell, M.D. —"Hepatic and Splenic Artery Ligation"; James B. Blodgett, M.D. and Prescott Jordan, Jr., M.D.—"Porta Caval and Spleno-Renal Anastomosis;" Eugene A. Osius, M.D.—"Phlegmasia Cerulea Dolens"; Joseph A. Arena, Jr., M.D.—"Experimental Frostbite"; Roger F. McNeill, M.D.—"Aortic Arch Aneurysm, Patent and Pericardial Effusion, Post Mitral Commissurotomy, Commissurotomy through Mural Thrombus"; Raymond R. Kanagur, D.S.C., M.D.—"The Chiropodist and the Vascular Surgeon"; Alexander Blain III, M.D.—"Splanchnicectomy and Adrenalectomy in Essential Hypertension."

* * *

Discussions of interest to medical schools and licensing boards will be aired at the 50th annual Congress on Medical Education and Licensure, February 7, 8 an 9 at the Palmer House, Chicago. Conducted under the auspices of the AMA's Council on Medical Education and Hospitals and the Federation of State Medical Boards of the United States, the Congress program will be built around a golden anniversary theme. More than 500 medical educators, officers and members of state licensing boards and others interested in post graduate medical education are expected to attend.

* * *

Officers of the Michigan Allergy Society for 1953-54 are: President, Donald S. Smith, M.D., Pontiac, Michigan; Vice President, Joseph H. Shaffer, M.D. Detroit, Michigan; Secretary, Sidney Friedlaender, M.D., Detroit, Michigan. The next meeting of the Society will be held in Detroit on January 20, 1954 at which time Dr. Elvin A. Kabat, Ph.D., Professor of Microbiology, College of Physicians and Surgeons, Columbia University, New York, New York, will address the group on "Quantitative Immunochemistry in the Study of Allergic Reactions."

* * *

Max Karl Newman, M.D., Detroit, was a speaker at the First National Meeting of Physical Medicine and Rehabilitation, October 30, 1953, at the University of Mexico, Mexico City. The topic was "Electromyography —Its Clinical Application".

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After refusing to accept transfer to another assignment, Miss Jane Hoey was officially discharged from her post as director of the Bureau of Public Assistance in the Department of Health, Education, and Welfare. Miss Hoey, a Democrat, had held the position for eighteen years. The Bureau has an annual budget in excess of $1.3 billion, spent in grants to states for the needy aged, the blind, dependent children, and the totally and permanently disabled. About $50 million is for various medical programs.

The issue was whether the post is purely administrative or policy-making. Miss Hoey maintained that it was not policy-making, therefore that she was not required to give way to an administration appointee. The Civil Service Commission ruled that the job properly belonged in Schedule C, because it is policy-making. Miss Hoey was removed November 3, six months after the commission ruling.

Secretary Hobby said the removal action in no way reflects on Miss Hoey's record of service in welfare work. The ousted official said she had enough accrued annual leave to carry her through to January, when she will qualify for a higher retirement bracket.—*AMA Washigtôn News Letters.*

* * *

When Congress reconvenes this month, it may be asked to liberalize federal income tax deductions for medical expenses. This is one of the suggestions expected to be made by the staff of the House Ways and Means Committee, which has been working on tax amendments since last summer.

Under present law adjusted, taxpayers may deduct only that part of medical expenses in excess of 5 per cent of gross income. The committee staff is considering proposing that this be changed to 3 per cent. It is estimated that the government would lose $150 million in revenue annually if this restriction is eased.

Another modification under discussion would eliminate the maximum limitation on medical expense deductions. Now it is $1,250 per year for a single person, $2,500 for one with one dependent, $3,750 for a married couple with one dependent, and $5,000 for a married couple with two or more dependents. It is pointed out that so few persons contract medical care bills of such size that the revenue loss to the government would be negligible. The committee staff also contemplates recommending raising the $600 earnings limitation on dependents who are students. The suggestion is to lift this ceiling in the case of students, so parents can continue to claim them as dependents even if their earnings exceed the $600.—*AMA Washington News Letter.*

* * *

Editors and business managers of the various state medical journals came to AMA headquarters on November 9 and 10 for the 1953 State Medical Journal Conference. With a total registration of 131, representing publications from Maine to Hawaii, the two-day seminar offered a wide coverage of subjects. Of particu-

lar interest to the editors and their assistants were talks by Paul de Kruif, Dr. Julian P. Price, Fred C. Sands of the Schering Corporation, and Prof. Paul D. Bagwell, head of the department of communications skills, Michigan State College.

The business representatives gave careful consideration to the ideas presented by Dr. Austin Smith; R. Blayne McCurry of Abbott Laboratories; William T. Coulter of Bruce Publishing Company; Alfred J. Jackson, who made a general report on the State Journal Advertising Bureau; Kenneth B. Butler of the Butler Typo-Design Research Center, and Gilbert S. Cooper of the AMA specialty journals, who suggested new techniques which will doubtless be reflected in several of the journals.

Highlight of the Monday evening session at the Hotel Knickerbocker was the talk given by Kenneth McFarland, Topeka, Kansas, educational consultant and lecturer for General Motors.

Dr. L. Fernald Foster, Bay City, Michigan, was chairman of the program which was moderated by other members of the SJAB advisory committee.

Noteworthy among the many letters of appreciation directed to Mr. Jackson, as director of the SJAB, were those from new personnel of the journals. They have been frank in saying that as a result of the conference they gained a better perspective for their own publications. —*AMA Washington News Letter.*

* * *

Ways of keeping well workers well and on-the-job are among the topics to be considered by representatives of labor, management and medicine at the 14th annual Congress on Industrial Health. Sponsored by the AMA's Council on Industrial Health, the Kentucky State Medical Association and a number of additional national and regional groups interested in health and safety for the smaller industrial plant, the meeting will be held February 24 and 25 at the Brown Hotel, Louisville, Kentucky.

In addition to the above subjects, the program also will be devoted to consideration of the control of emergencies in industrial plants and the community as well as other technical problems of current interest in the industrial health field. Two special features will be a workshop on emphysema with reference to coal miners and a conference on union and management sponsored health centers.

A pre-conference planning session will be held Feb. 23 for chairmen of state medical society industrial health committees and Council members to review progress during the past years and to determine future action.

* * *

The Atomic Energy Commission has granted the University of Michigan a renewal of its contract for the continuation of its research in "Clinical Evaluation of Teletherapy", which is being conducted by F. J. Hodges and Isadore Lampe.

* * *

Polio Vaccine.—A nationwide study to determine the effectiveness of a polio vaccine in preventing paralytic polio will get underway in one or more southern states



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during the week of February 8, 1954. Prior to this date, Dr. Jonas E. Salk, Research Professor of Bacteriology at the University of Pittsburgh—the research grantee of the National Foundation, who developed the vaccine—will have resumed his immunization studies in Allegheny County, Pennsylvania with vaccination of 5,000 to 10,000 additional children. This was announced today by Basil O'Connor, president of the National Foundation for Infantile Paralysis.

In a gradually expanding program, more than two hundred counties throughout the United States will be involved before the mass vaccination project ends by June 1, 1954. During that period, 500,000 to 1,000,000 school children of the second grade will have taken part in one of the largest studies of its kind ever undertaken. Participation will be on a voluntary basis with the consent of the child's parents or legal guardians. Final results of the evaluation study are not expected until some time in 1955.

In general, school children of the second grade will be vaccinated during a non-epidemic period and then observed during a subsequent polio epidemic to evaluate the protective effects of the vaccine. The basic factor for determining the protective effects of the vaccine will be a comparison of the incidence of paralytic polio in the vaccinated group with that of children in the first and third school grades.

In the counties selected for the study, local physicians will administer the vaccine under the supervision of the county health officer. Members of the National Foundation's 3,100 chapters will participate as volunteers in providing the many non-professional services required in the mass vaccinations. Other community and civic groups also will play a leading role in easing the task of vaccinating a half million or more children in hundreds of communities throughout the nation.

* * *

Louis N. Katz, M.D., Chicago, will conduct a course in electrocardiographic interpretation for graduate physicians at the Michael Reese Hospital, beginning February 3 and continuing each Wednesday thereafter from 7:00 to 9:00 p.m. for twelve weeks. For further information, write Mrs. Rivian H. Lewin, Administrative Secretary, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago 16, Illinois.

The sincere thanks of the Michigan State Medical Society goes to the Wayne County Medical Society for loaning its excellent portrait of Dr. William Beaumont for use during the summer months in the Beaumont Memorial on Mackinac Island. The Memorial is to be dedicated on July 17, 1954.

Twenty-seven million people are now enrolled in Blue Shield medical care plans, according to a report from the Blue Shield Commission of Chicago.

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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

The Woman's Auxiliary of the United States and Canadian sections of the International College of Surgeons recently set aside $6,500 for grants for surgical fellowships, $3,000 to finance study abroad by an American or Canadian surgeon; $3,000 for study in the United States or Canada by a foreign surgeon; and $500 to be given to a senior medical student at the University of British Columbia, in Vancouver, B. C.

* * *

John M. Sheldon, M.D., Ann Arbor, is one of the trustees of the newly established American Foundation for Allergic Diseases with offices in New York City.

Congratulations Dr. Sheldon!

* * *

The fourth Sectional Meeting of the American College of Surgeons is scheduled for French Lick Springs, Indiana, March 15-16-17, 1954. In addition to medical motion pictures, the scientific program will include many prominent speakers.

On Monday, March 15, papers will be presented by K. W. Warren, M.D., Boston; M. I. Marks, M.D., E. V. Hahn, M.D., and W. H. Norman, M.D., and J. E. Pilcher, M.D., Indianapolis; R. A. Reis, M.D., Chicago; D. A. Bickel, M.D., South Bend; Curtis Tyrone, M.D., New Orleans; R. E. Campbell, M.D., Madison; W. H. Cole, M.D., and K. W. Warren, M.D., Boston; J. M. Leffel, M.D., and W. D. Gatch, M.D., Indianapolis.

The Tuesday program features papers by C. S. Culpertson, M.D., South Bend; H. B. Schumacker, Jr., M.D., Indianapolis; W. H. Cole, M.D., Chicago; Major Edward J. Jahnke, Jr., WSAF; W. N. Wishard, Jr., M.D., Indianapolis.

The Tuesday afternoon panel discussions will feature W. G. Maddock, M.D., Chicago; J. O. Ritchey, M.D., Indianapolis; E. H. Ellison, M.D., Columbus; Wm. Requarth, M.D., Decatur; P. D. Wilson, New York; K. A. Fischer, M.D., Louisville; H. B. Lacey, M.D., Columbus; C. E. Badgley, M.D., Ann Arbor, and J. A. Dickson, M.D., Cleveland.

The Tuesday evening program will present George Crile, Jr., M.D., Cleveland; Frank Glenn, M.D., New York; Curtis Tyrone, M.D., New Orleans; J. D. Thomas Rogers, M.D., Urbana, and C. D. Branch, M.D., Peoria.

* * *

The Michigan Academy of General Practice recently elected the following officers: K. L. Swift, M.D., Detroit, president; K. W. Toothaker, M.D., Lansing, president-elect, and R. F. Fenton, M.D., Detroit, secretary-treasurer. F. E. Luger, M.D., Saginaw, was named delegate to the national academy, and John R. Rodger, M.D., of Bellaire, alternate delegate.

* * *

Harold C. Mack, M.D., Detroit was recently elected president of the Central Association of Obstetricians and Gynecologists.

Congratulations, Dr. Mack!

* * *

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of material gain. He maintains the dignity of his calling by adopting and promoting the highest standards of ethics and works continuously for the elimination of all questionable practices in his business or profession.

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* * *

A new thirteen-week Medical Television Show sponsored jointly by the Washtenaw County Medical Society and the Michigan State Medical Society opened November 12, 1953, over Station WPAG-TV, Ann Arbor. The show will be produced every Thursday at 8:30 p.m. over Channel 20. The half-hour shows will use films from the American Medical Association, the Michigan State Medical Society, and from private and state sources.

ORGANIZED MEDICINE AND ORGANIZED PUBLIC HEALTH

(Continued from Page 67)

is meant by rest; and by helping the mothers to plan gradual activities under the private doctor's orders. She can also help private physicians by providing health teaching for his patients. She can teach the need for routine examinations, can translate diet suggestions into menus, and she can explain to the private physician home situations which may influence the physical and mental health of his patient.

In conclusion let me suggest that by making use of its social arm, the public health profession. the medical profession will find a strong ally whenever it becomes necessary to disseminate health education and to guide public opinion. I will close by quoting an editorial from the *New England Journal of Medicine:* "The character of medical practice is progressing, and its practitioners must progress with it. There will always be illness to be treated, lives to be ushered into the world and departures to be eased, but the first function of the physician should become the prevention of disease or its recognition in its earliest stages, and the maintenance of health.

"When the private practitioner and the public health officer can see their duties as mutually interdependent parts of the general plan to benefit the health and happiness of all mankind, then another step will have been taken in the direction of an attainable millennium."



THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CURRENT THERAPY 1953; Latest Approved Methods of Treatment For The Practicing Physician. Editor, Howard F. Coon, M.D.; Consulting Editors: M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, Wm. J. Kerr, Perrin H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobert A. Reimann, Cyrus C. Sturgis, and Robert H. Williams. Philadelphia: W. B. Saunders Co., 1953. Price $11.00.

This text follows the over-all format and plan of the previous printings and serves to bring to the doctor the very latest in the fields of therapeutics. The present volume has 209 new contributions, eleven of which are from the two Medical Schools in our own state. Much of what was in the previous edition is necessarily included as it is obvious that radical changes in the therapy of certain diseases will not occur each year. However, it is of interest, and important, to know whether changes have occurred or not. The authors have discussed their present methods of treatment whether it is a long established and proved procedure or a new advance. This gives the busy doctor a ready reference for detailed advice and as such this text is a valuable addition to his library.

G.W.S.

SYNOPSIS OF PEDIATRICS. By John Zahorsky, A.B., M.D., F.A.A.P., Professor Emeritus of Pediatrics and formerly Director of the Department of Pediatrics, St. Louis University School of Medicine, and formerly Pediatrician-in-Chief to the St. Mary's Group of Hospitals; Fellow of the American Academy of Pediatrics. Assisted by T. S. Zahorsky, B.S.. M.D., Senior Instructor in Pediatrics, St. Louis University School of Medicine, and Assistant Pediatrician to the St. Mary's Group of Hospitals. Sixth edition with 158 text illustrations and 9 color plates. St. Louis: The C. V. Mosby Company. Price $6.00.

The sixth edition of this book is practically identical to the previous edition with but few changes. These, however, are mostly an attempt to bring treatment up to date by inclusion of the newer drugs and the addition of an appendix briefly covering medical emergencies. There are no new illustrations. The book continues to be of a general informative nature.

J.L.

NUTRITIONAL STUDIES IN ADOLESCENT GIRLS AND THEIR RELATION TO TUBERCULOSIS. By Joseph A. Johnston, M.D., Pediatrician-in-Chief Henry Ford Hospital and the Edsel B. Ford Institute for Medical Research, Detroit, Michigan. Springfield, Illinois: Charles C Thomas, 1953. Price $7.50.

The author's work in nitrogen-calcium balance in periods of growth is well known. These metabolic studies over a period of twenty years are now recorded in this excellent book, which is written in an effort to show that the increase in the adult form of tuberculosis in adoles-

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cence is related to a failure to meet the nutritional requirements for growth in this period.

In the tuberculosis patients studied, the author establishes a correlation between the adequate storage of nitrogen and calcium and a favorable course of the disease.

The role of rest, activity, endocrines, vitamins and foci of infection in the healing process is considered. The book is a "must" for nutritionists, pediatricians and other workers in the field of tuberculosis.

R.J.S.

RHEUMATIC DISEASES. Based on the Proceedings of the Seventh International Congress on Rheumatic Diseases. Prepared by the Committee on Publications of the American Rheumatism Association. Charles H. Slocumb, M.D., Chairman; Howard F. Polley, M.D., Wm. D. Robinson, M.D., Richard T. Smith, M.D., Charles Ragan, M.D., Edward F. Rosenberg, M.D., and Carlos Sacassa, M.D. Illustrated. Philadelphia: W. B. Saunders Co., 1952. Price, $12.00.

Most of the talks or abstracts of the talks that were given at the Seventh International Congress on Rheumatic Diseases are included in this volume. A great many fields of interest are served in these pages, and many points of view appear. There are listed 195 contributors from all over the world, seven of which are from Michigan. Subject matter ranges from the histology and biochemistry of connective tissue to hormone therapy, physical rehabilitation, psychogenic rheumatism, orthopedic surgery, serologic studies, etc.

General information about rheumatic diseases, rheumatic fever, rheumatoid arthritis and closely related syndromes, fibrositis, psychogenic rheumatism, osteoarthritis, various modes of therapy, other less common types of rheumatic diseasc and laboratory and investigative studies are adequately covered in twenty chapters. All of this is not only of value to the physician and laboratory man, but also of value in delineating our present status in an ever changing and difficult field of study.

G.W.S.

MODERN TREATMENT—A GUIDE FOR GENERAL PRACTICE. By fifty-three authors. Edited by Austin Smith, M.D., Editor of *The Journal of the American Medical Association,* and Paul L. Werner, M.D., Secretary, Committee on Research, American Medical Association. New York: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers. 1953. Price $20.00.

Here, truly, is a comprehensivc volume of some 1100 pages designed to give the general practitioner a useful and authoritative guide to the clinical problems in therapy as is encountered in his daily practice. The contributing authors are of great experience and they adequately present the most effective treatment, and in instances where necessary, alternative forms of treatment are also considered. The chapters have been organized to present the information in a logical sequence and each chapter, also, is made sufficiently complete to stand by itself. This is of tremendous value to the busy physician.

Certain chapters have been included which one ordi-

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*GREENE, B.A.: The Place of Leather Soled Shoes in the Prevention of Anesthesia Explosions, Anesthesiology 13:203-209 (March) 1952.

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narily does not find in such books because it was felt that such subjects as principles of pharmacology, immunity, radiology, surgery, laboratory procedures, physical medicine, psychosomatic medicine and inhalation therapy, wherein applicable, were necessary to carry out therapy in general practice intelligently and successfully. There are fifty-one chapters, ranging from "The Patient-Physician Relationship" to "Poisoning by Pesticides." The format is excellent and the type is large which makes for ease of reading and comprehension. The charts, tables and diagrams are adequate in number and are very well prepared. This book can be highly recommended.

G.W.S.

ENCYCLOPEDIA OF ABERRATIONS. A Psychiatric Handbook. Edited by Edward Podolsky, M.D., State University of New York Medical College. Foreword by Alexandra Adler, M.D., New York University College of Medicine. 550 pages. New York: Philosophical Library. 1953. Price $10.00.

This volume is an innovation in its attempt to cover all the basic manifestations of aberrational behavior, including such components as sexual, mental, emotional, character, religious, instinctual, social, sensory, intellectual and perceptive. The gamut of irregularities are covered alphabetically from abasia to zoosadism. Space is devoted to the discussion of hallucinations, delusions and of more complex mental disturbances. Much of this material consists of magazine articles reprinted from neuropsychiatric and psychoanalytic journals. Apparently there has been no re-editing of these articles—they are merely incorporated as reprints. The definitions have been based on the Freudian school of psychoanalysis which because of its limitations delimits the use of the word "encyclopedia."

Possibly an exhaustive work on this subject could not have been contained in one volume. It would seem preferable to have had several volumes than to have it limited to its present degree. The price is high.

G.K.S.

ELECTROCARDIOGRAPHY IN PRACTICE. By Ashton Graybiel, M.D., Captain, Medical Corps, United States Navy; Director of Research, United States Naval School of Aviation Medicine, Pensacola, Florida; Paul D. White, M.D., Executive Director, National Advisory Heart Council, Consultant in Medicine, Massachusetts General Hospital; Louise Wheeler, A.M., Executive Secretary of the Cardiac Laboratory, Massachusetts General Hospital, and Conger Williams, M.D., Instructor in Medicine, Harvard Medical School, Associate Physician, Massachusetts General Hospital. Third Edition. 294 figures. Philadelphia: W. B. Saunders Co., 1952.

The authors' last previous edition was published in 1946, and during the ensuing years the interest and investigation in the field of electrocardiography has rapidly increased, both theoretical and clinical. Because of this, this third edition has been completely rewritten, format and composition changed, and amplified where needed. On the whole it is a much finer book, as excellent as the previous editions were in their time. Current status of the so-called unipolar leads and of vectocardiography

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is amply covered; practical advances in clinical electrocardiography are listed, and a concise, but comprehensive, historical account of the evolution of the concepts of electrocardiography over the past one hundred years is presented. However, the authors have continued to make the primary aim of this book the production of an atlas containing many tracings primarily for the practitioner of medicine, and it is not intended to be a textbook.

The book is divided into eight parts as follows: Introductions, two chapters; Methodology, one chapter; The Typical Normal Electrocardiogram and Its Variations, five chapters; Disorders of Rhythm and Conduction, one chapter; Alterations due to Drugs and Chemicals, one chapter; Electrocardiographic Patters, one chapter; Etiologic Types, eleven chapters; and the "Unknowns" for Practice in Interpretation. This arrangement is excellent. The 294 illustrations in this book are again of the highest possible quality and the authors and publishers are to be complimented. In a field in which so many new texts are appearing, we can sincerely recommend this book as one of the best available.

G.W.S.

PSYCHOTIC AND NEUROTIC ILLNESSES IN TWINS. By Eliot Slater, with the assistance of James Shields. Statistical Appendix by Joan May. London: Her Majesty's Stationery Office, 1953. Price $4.75.

This paper-backed book is the result of another attempt to weigh the relative effects of heredity and environment in relation to the cause of mental illness. There have been previous studies on twins, but because of the lack of an absolute conclusiveness, this present work was begun in 1936 by a British group and continued up to the time of publication except for an interruption during the war.

Two hundred and sixty-six propositi were examined by the author. Finger-print analyses were made to determine ovularity. The cases were classified into four main groups: schizophrenic psychoses, affective psychoses, organic disorders, and psychopathic and neurotic states. Their results were quite similar to other reports, though somewhat lower in schizophrenia. Their figures were 76 per cent to that of Kallmann's 86 per cent. To complete their report, they present a collection of both uniovularity and biovularity cases of the different groups. At

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the end of each presentation, there are summaries of that group.

Their general conclusions are that heredity is an important factor in the etiology of disease and that the basic makeup of the personality is largely determined by heredity.

G.K.S.

MANIC-DEPRESSIVE DISEASE. Clinical and Psychiatric Significance. By John D. Campbell, M.D. Diplomate, American Board of Psychiatry and Neurology; Fellow, American Psychiatric Association; Attending Psychiatrist, Georgia Baptists Hospital and St. Joseph's Infirmary, Atlanta; Chief Psychiatrist, Peachtree Sanitarium, Atlanta; Captain, MC, U.S.N.R., Philadelphia, London, Montreal: J. B. Lippincott Company. 1953. Price $6.75.

This textbook is a very interesting and apparently a valuable addition to psychiatric literature. The author's concepts are somewhat different than the usual explanation regarding manic depressive psychoses. He believes that the depressions are wholly endogenous and that the psychic manifestations are secondary to the physiological. Therefore, psychotherapy in these cases has little, if any, value, and such patients must be treated from a medical and electroconvulsive standpoint. He also has found a collection of cases of manic depressive manifestations in childhood. This viewpoint is at variance with other textbook authors on this subject. He stresses the personality make-up of predisposed individuals to the illness, attributing their pattern of behavior on a constitutional basis. He presents the somatic symptoms of depressions which should be of special interest and value to internists. The reviewer is of the opinion that he is correct in his thesis.

The book is well organized and can be unqualifiedly recommended to psychiatrists, internists and students.

G.K.S.

THE NURSING MOTHER. A Guide to Successful Breast Feeding. By Frank Howard Richardson, M.D. 204 pages. New York: Prentice-Hall, Inc. Price $2.95.

Physicians are well aware of the present tendency among women to repudiate nursing and "put the baby on a bottle." Since too many young mothers lack knowledge of nursing advantages and techniques, a book of information and instruction has been needed. This one helps to fill that void.

The general set-up of the book makes it especially readable and easily understood. It consists of informal discussions of the common problems. Additional subjects are considered, among them the role of the father, allergies, and weaning. The arguments show the value of nursing over bottle feeding and the methods producing the best results with the least discomfort. Seven drawings and eight photographs augment and clarify the text. A good summary is given four times throughout the book, each a chapter of questions and answers.

This book should be helpful to that young woman who, although she wants to be "a good mother," questions the advisability of nursing her baby. Attendants in hospital nurseries will find it valuable; they can loan it to lying-in mothers.

S.T.L.

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Fractures and Traumatic Surgery, two weeks, starting March 1
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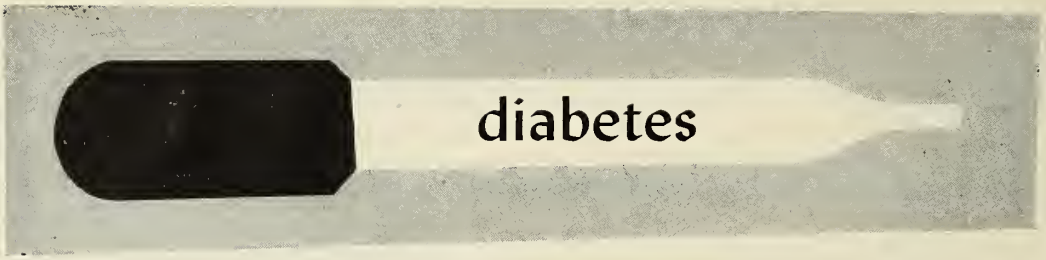
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1. Blotner, H., and Marble, A.: New England J. Med. *245*:567 (Oct. 11) 1951.
2. Steine, L.: GP *8*:45 (July) 1953.

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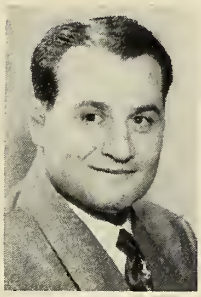
THE JOURNAL
of the Michigan State Medical Society

VOLUME 53 FEBRUARY, 1954 NUMBER 2

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*Deceased, November 30, 1953.

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"*Welcome*" will be the password at the 1954 Michigan Clinical Institute scheduled for the Sheraton-Cadillac Hotel, Detroit, Wednesday-Thursday-Friday, March 10-11-12.

"Glad You Are Here" will be the phrase that greets you as you arrive at the eighth annual Institute.

The successful "block system"—grouping those talks of one specialty or related specialities—again will be featured at the 1954 MCI. A copy of the program was mailed to all MSMS members about February 1.

Attend this very worthwhile Michigan Clinical Institute—we urge you to be in Detroit, March 10-11-12, where a fine medical banquet and plenty of "Welcome" will be presented to all doctors of medicine, with the compliments of the Michigan State Medical Society. Hotel reservations should be made *Now*.

OUR GROUP HEALTH AND ACCIDENT INSURANCE PROGRAM

In activating the decision of the 1953 MSMS House of Delegates, the Executive Committee of The Council has authorized the following statement:

The immediate response to the group health and accident insurance program, approved by the 1953 Michigan State Medical Society House of Delegates and underwritten by the Provident Life and Accident Insurance Company, was most satisfactory.

All valid applications are now in force and several claims already have been paid by Provident.

A nationally known insurance consultant has the following to say about the group health and accident plan offered to the members of the Michigan State Medical Society: "I believe that the basis of rates charged by Provident are in keeping with sound actuarial principles and in my judgment the benefits promised by the proposed Provident plan are much more comprehensive."

All Michigan doctors of medicine here have an excellent opportunity to *increase* their protection against accident and sickness disability. Your MSMS Officers feel that your group health and accident insurance program, the first and only group health and accident insurance plan endorsed by the Michigan State Medical Society, is one of the choice privileges of your State Society membership.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL
Meeting of November 18, 1953

Ninety-three items were presented to the Executive Committee of The Council on November 18. Chief in importance were:

- **Improvements in MSMS "home" at Lansing.** The new entryway and reception room are now complete; a parking lot for eight cars also has been installed on the Hillsdale Street side of the property.
- **Health and Accident Insurance program.** A digest of progress in this MSMS House of Delegates—approved program, being made available to all MSMS members by the Provident Life and Accident Insurance Company, was outlined. An advertisement in JMSMS by Provident was approved.
- **Activation of the periodic appraisal program,** developed by the Committee on Periodic Health Appraisal in collaboration with the MSMS Public Relations Committee, was given the "green light" by the Executive Committee of The Council.
- **Hospital standards and inspection.** The Michigan Health Commissioner's proposed rules and regulations re standards and inspection of hospitals coming within the purview of Act 227 of the Michigan Public Acts of 1953, were referred to the MSMS Hospital Relations Committee for study and report back to the Executive Committee.

  E. H. Berry, M.D., Flint, was appointed to the MSMS Hospital Relations Committee.
- **"Golden Goose" meeting** throughout the state. Report was given by the secretary on these meetings; their total will be well over 100 prior to March 10, 1954. The Executive Committee authorized Wm. S. Reveno, M.D., Detroit, Chairman of the Advisory Committee to Michigan Hospital Service, to prepare a study of the Committee's recent survey, for publication in JMSMS.

(Continued on Page 128)



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 126)

Letters to all MSMS members and to chiefs of staffs of Michigan hospitals, re the subject of hospital utilization, were approved and authorized to be mailed.

A plaque, to be used in doctors' waiting rooms, as recommended by the Advisory Committee to MHS, also was approved.

A "Golden Goose Breakfast" was scheduled to be held during the Michigan Clinical Institute—specifically on Thursday, March 11, 1954, Sheraton-Cadillac Hotel, Detroit, during the Michigan Clinical Institute.

- **The monthly financial reports** and bills payable were studied and approved.
- **Committee reports**—The following reports were given consideration: (a) Committee on Scientific Work, meeting of November 4; (b) Emergency Medical Service Training Course, meeting of November 4; (c) Rheumatic Fever Control Committee, meeting of November 4; (d) Rural Medical Service Committee, meeting of November 5; (e) Advisory Committee to Michigan Hospital Service, meeting of November 11; (f) Michigan Cancer Co-ordinating Committee, meeting of November 12; and (g) Beaumont Memorial Committee, meeting of November 17.
- **Reports of the Chairman of The Council,** The President, the President-Elect, the Secretary, and the Editor, were presented and accepted. Progress report from the Public Relations Counsel was presented and approved.
- **H. A. Furlong, M.D.,** Pontiac, was appointed Chairman of the 1953-54 Basic Science Study Committee. Members are D. W. Thorup, M.D., Benton Harbor, and C. E. Umphrey, M.D., Detroit.
- **1953 MSMS House of Delegates resolution** re reporting of venereal disease was referred to a joint study committee composed of two representatives from each of the following groups: Michigan Health Officers Association, Michigan Pathological Society, MSMS Venereal Disease Control Committee, Michigan Department of Health, and the MSMS Council.
- **1954 Michigan Clinical Institute:** The secretary reported that a dinner in honor of John M. Sheldon, M.D., Ann Arbor, President of the American Academy of Allergy, was being planned by the Michigan Allergy Society, for Wednesday evening, March 10, 1954.
- **Michigan Rural Health Conference** invitation that MSMS be a co-sponsor of its 1954 Conference, scheduled for Saginaw, January 14-15, was accepted, with thanks.
- **Survey of MSMS members** to ascertain which M.D.'s in this state are contributing toward the education of young men and women in the health professions (medical, nursing, pharmaceutical, dental, etc.) was authorized for inclusion in a Secretary's Letter to be mailed to all MSMS members.
- **1954 Annual Session.** (a) William S. Reveno, M.D., Detroit, was appointed General Chairman of Arrangements; (b) House of Delegates Press Relations Committee, J. E. Livesay, M.D., Flint, Chairman; K. H. Johnson, M.D., Lansing; L. Fernald Foster, M.D., Bay City; R. A. Johnson, M.D., Detroit, and C. L. Weston, M.D., Owosso; (c) Scientific Press Relations Committee, R. A. Johnson, M.D., Detroit, Chairman; H. F. Dibble, M.D., Detroit; J. G. Molner, M.D., Detroit; and E. F. Sladek, M.D., Traverse City.
- **Joint meeting with Michigan's Delegates** to the AMA House of Delegates (W. A. Hyland, M.D., W. D. Barrett, M.D., J. S. DeTar, M.D., W. H. Huron, M.D., R. A. Johnson, M.D., R. L. Novy, M.D., and G. C. Penberthy, M.D.): Eleven items were discussed and advice was offered on matters that may be considered at the AMA Clinical Session, St. Louis, Mo., December 1-4, 1953.
- **Four items of mutual interest** were discussed with State Health Commissioner A. E. Heustis, M.D.
- **The monthly report of Rheumatic Fever Co-ordinator** Leon DeVel, M.D., Grand Rapids, was presented and accepted.

THE BRICKER AMENDMENT

Apropos the Bricker Amendment mentioned on our editorial pages in this issue, we are making the following quotation from the Legislative Report Release of Congressman H. R. Gross of Ohio, January 6, 1954. Under present Supreme Court decisions, these treaties and International Documents have the effect of law, even if contravening the conditions of the Constitution and the laws of the states or nation.

Since the end of World War II, more than 1,000 documents have been added to the State Department's file of Treaties and International Documents and additional thousands of international agreements, entered into since 1945, have not yet been published. The treaties and agreements that have been signed and published in this brief period represent *almost half the total number of such documents previously made effective in the entire history of this republic, and many are as important as this nation ever signed.*

What is the cost in assuming these obligations? No one really knows. In terms of dollars appropriated and spent and in terms of battle casualties we have some estimate of the cost, *but many of these commitments and obligations are open-ended and we have learned by wretched experience that in such instances neither costs nor consequences can be foreseen!*

Readers of these columns will recall that about six months ago I related in detail the story of action taken

(Continued on Page 30)



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*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

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THE BRICKER AMENDMENT

(Continued from Page 128)

in the United Nations through adoption of a resolution providing that any government so disposed could at any time nationalize any and all properties within its domain. This U. N. resolution simply proclaimed to the world that the government of any member nation could and would at any time seize private property for the use of the state.

Latest report of the Senate Committee on Reduction of Non-essential Federal Expenditures shows that there were still nearly 183,000 American civilians on the federal payrolls outside the continental United States. That figure doesn't include a single person in the military services.

It means, when families of these 183,000 are taken into account that the government is spending several hundred millions of dollars a year to transport and maintain this army of civilians all over the world.

HARPER HOSPITAL REUNION

(During Michigan Clinical Institute)

On Wednesday, March 10, 1954, the Harper Hospital reunion will open with a reception at 6:30 p.m., to be followed by dinner at 7:30 and entertainment at 9:00 o'clock, all to be held in the Grand Ballroom, Sheraton-Cadillac Hotel, Detroit.

Dr. Dale P. Osborn of Cincinnati, Ohio, and Chief Cardiologist to the Good Samaritan Hospital, former assistant superintendent of Harper Hospital, and former intern and resident of the same hospital, is the chairman.

Great plans are on foot to make this reunion a pleasant and happy one. For detailed information, contact Lawrence Reynolds, M.D., Chief of Staff and Chairman, 10 Peterboro, Detroit, Michigan.

"BLOCK SYSTEM"

What is the "Block System" used by MSMS at the Michigan Clinical Institute in March and at its Annual Session in September?

Answer: The successful "block system," inaugurated at the Michigan Clinical Institute of 1951—and used for the first time at the 1953 MSMS Annual Session, means the grouping of those talks of one specialty or related specialties.

Example: All surgical talks are grouped and presented on one morning or one afternoon, thus permitting those doctors of medicine primarily interested in surgery to attend one session or "block" and relieving them of the necessity of covering all three days of the meeting.

"INDIANA DAY" PLANNED AT 1954 MCI

Indiana Day will be fittingly celebrated during the forthcoming Michigan Clinical Institute—on Thursday, March 11, 1954.

This date has been set aside as a special day honoring all M.D.'s from the Hoosier State who attend the Michigan Clinical Institute. The designation of Indiana Day, by the Michigan State Medical Society, has been approved by The Council of the Indiana State Medical Association.

All Michigan registrants at the MCI are urged to extend the hand of welcome to their medical neighbors from Indiana on Thursday, March 11—"Indiana Day."

COLOR TV COMES TO 1954 MCI

Detroit, March 10-11-12, 1954

This year color television will make its initial appearance in the postgraduate teaching program of the Michigan Clinical Institute. The addition of color telecasts to the traditional postgraduate teaching programs of professional meetings began almost five years ago when Smith, Kline & French Laboratories first sponsored this service to the medical profession. Since then, telecasts at fifty-three medical meetings have been made.

Everywhere the color medium has been presented, doctors have acclaimed it as a "revolutionary" development in medical education, with far reaching significance for every medical school in the country.

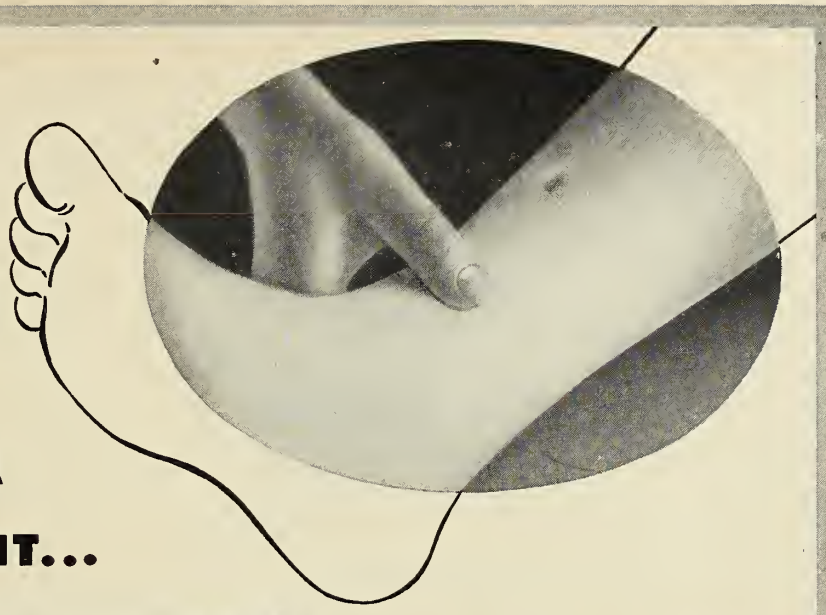
Why has color television been received with such wide and enthusiastic acceptance by the medical profession? Because it met an urgent need of modern medical education, a need brought about, ironically enough, by the progress of medicine. Surgery today requires an operating team that surrounds the operating table. Consequently, most of the intricacies of an operative procedure are lost to viewers seated in an amphitheater, even those amphitheaters that are of the most modern design. Thus as a result of the development of the surgical team, the all-important teaching method of close-up observation by students and interested graduates suffered a real setback. The difficulty is much the same in teaching clinics. The details of a clinical demonstration often can be seen satisfactorily by only a small number of persons, a situation reducing the clinic's teaching effectiveness.

Color television is "revolutionary" in that it not only reinstates the close-up teaching method, but greatly improves it. Once having seen the ease with which the camera can televise items very small or very large in rapid sequence, a physician can appreciate what it means to students and other doctors when the eye of the camera brings them to within inches of operative and clinical procedures.

When the camera is focused on a surgical field, the audience's view is better than that available to some members of the operating team. At a recent medical meeting where eye operations were being televised, the eye as seen on the giant screens was approximately three feet high and four feet wide. While such a vivid picture would be no less than horrible to a lay audience, the almost unlimited possibilities for medical education implied in this same picture should be apparent to every physician.

The possibility of using color television for undergraduate medical instruction does not mean

(Continued on Page 132)



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WINTHROP

1. Abramson, Julius, Bresnick, Elliott, and Sapienza, P. L.: *New England Jour. Med.*, 243:44, July 13, 1950.

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COLOR TV COMES TO 1954 MCI

(Continued from Page 130)

that the staffs of medical schools will have to be part actors, part TV technicians. It does mean that the greatest variety of pertinent clinical material and close-up views of "live" surgical procedures can easily be brought to vastly increased undergraduate audiences. Color television can be expected to count heavily in any future plans concerned with new techniques for medical education.

Smith, Kline and French Laboratories of Philadelphia as sponsors of this modern and highly effective type of postgraduate medical education are to be congratulated and commended on their tangible contribution to Medicine. A scroll of appreciation will be presented to Smith, Kline and French Laboratories by the Michigan State Medical Society on occasion of the Michigan Clinical Institute, Wednesday, March 10, 1954, in Detroit.

PAYMENT OF 1950 AMA MEMBERSHIP DUES

The AMA House of Delegates, in St. Louis, December 1-4, 1953, adopted the following resolution:

"RESOLVED, that any active member of the American Medical Association who failed to pay dues for the year 1950, and who was suspended for such delinquency, may be reinstated during the first six months of 1954 by payment of 1954 dues only.

Should such an individual fail to pay his 1954 dues by July 1, 1954, he shall continue to be considered delinquent."

HIGH RETURN ON ANNUAL SESSION QUESTIONNAIRE

Thanks are due a high percentage of the MSMS membership who executed and returned the questionnaire on MSMS Annual Sessions. The amazing total of 974 questionnaires have been received to date. Many fine suggestions for improving future Annual Sessions were included under "Remarks." The Council expressed its gratitude for this tangible evidence of co-operation and assistance. It will work all the harder to make the MSMS convention the best of its kind in the world.

ANNUAL ENROLLMENT

For Doctors and Assistants

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MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954

March 9	American College of Surgeons, Michigan Chapter	Sheraton-Cadillac Hotel, Detroit
March 10-12	MICHIGAN CLINICAL INSTITUTE	Sheraton-Cadillac Hotel, Detroit
March 12	Fifth Annual Michigan Heart Day (During MCI)	Sheraton-Cadillac Hotel, Detroit
Spring	MSMS Postgraduate Extramural Courses	State-wide
April 14	Genesee County Medical Society 9th Annual Cancer Day	Flint
May 6	Ingham County Medical Society Clinic Day	Lansing
May 12	Annual Clinic Day and Alumni Reunion of Wayne University College of Medicine (testimonial to Michigan's Foremost Family Physician, Wm. J. Stapleton, Jr., M.D.)	Hotel Fort Shelby, Detroit
May 20	American College of Surgeons Annual Symposium on Trauma and Nutrition	Ann Arbor
June —	Bon Secours Hospital Annual Clinic Day	Detroit
June 18-19	Upper Peninsula Medical Society Annual Meeting	Menominee
June 21-25	AMA Annual Session	San Francisco
June —	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
July 17	Beaumont Memorial Dedication	Mackinac Island
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
September 29-30-October 1	MSMS ANNUAL SESSION	Detroit
Oct. 14-15	Michigan Cancer Conference	East Lansing
Autumn	MSMS Postgraduate Extramural Courses	State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.



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SCHERING

Washington Letter

Although the budget, defense and farm policy are monopolizing Washington headlines, Congress is paying more than casual attention to the health and social security fields. In these, as in other legislative areas, it has for its guidance a specific program, laid down by President Eisenhower in his various messages during the first few weeks of the session. The question now is whether this closely-divided Congress will have the time and/or the inclination to follow through on everything the Administration wants.

Before Congress settled down to its task, the President met with a group of American Medical Association leaders, who discussed with him the Association's position on several important pieces of legislation. Present at the White House meeting, in addition to Mr. Eisenhower and Sherman Adams, Assistant to the President, were AMA President Edward J. McCormick, Trustees' Chairman Dwight H. Murray, President-Elect Walter B. Martin, and Washington Office Director Frank E. Wilson.

Congress got into the health and welfare field with no waste of time. Within five days after Congress reconvened the House Interstate and Foreign Commerce Committee, under the chairmanship of Rep. Charles Wolverton (R., N.J.), began an exhaustive series of hearings on voluntary health insurance, further evidence that the Administration is determined to get some action in this direction.

Chairman Wolverton as long as four years ago was interested in legislation to help pre-paid insurance programs extend their coverage and increase their benefits. In 1950 he incorporated his ideas in a bill, but it was not acted upon by the committee and was not revived until this year. Now the atmosphere is much more favorable for Mr. Wolverton's proposal. Not only is he chairman of the committee and his party in control of Congress, but his ideas have strong support from the Adiministration.

Basically the Wolverton idea is an FDIC for voluntary health insurance. In about the same way the Federal Deposit Insurance Corporation insures bank deposits up to a certain limit, the Wolverton program would insure (or re-insure) various types of hospital, surgical, and medical insurance programs. The proposal is for the federal government to set up a national health insurance underwriting corporation. To keep the corporation going, the member plans would contribute a certain percentage of their gross receipts, possibly 2 per cent.

With the national corporation underwriting unusual risks, the individual programs could offer catastrophic or "complete" coverage. By scaling individual premiums to the family income, the member plans also could offer protection to families with very low incomes. The national corporation would pay possibly two-thirds of each subscriber's claim in excess of, say, $500 or $1,000 in any one year. (The Editor will analyze and comment on this measure in the March issue.)

Another piece of legislation, receiving favorable attention, also would help families with their medical expenses—a proposed liberalization of income tax deductions allowed for medical expenses. Under present law only that part of medical expense exceeding 5 per cent of taxable income may be deducted. The pending legislation would drop this to probably 3 per cent, and raise or eliminate the maximum limit. In past years scores of bills pointed in this direction have been introduced. If this is incorporated in the general tax overhaul legislation, it is believed to have a good chance of enactment.

Secretary Hobby's Department of Health, Education and Welfare is firmly behind a proposal to have the federal government show more leadership in vocational rehabilitation of the handicapped. At this writing it is too early for any good indication as to whether physicians will be brought under social security. The Administration's bill would blanket in most self-employed groups, including dentists, attorneys, architects and farmers, in addition to physicians. Rep. Carl Curtis (R., Neb.), chairman of the subcommittee which investigated social security, apparently feels the same way. However, a substantial number of the members of the House Ways and Means Committee, which must pass on the bill, are known to feel that compulsion should not be used on groups that do not want Old Age and Survivors Insurance.

From all indications available during the first few weeks of Congress, a showdown fight may be unavoidable on medical care for military dependents. Defense Department, with support from the President, wants dependent care extended and made uniform among the three services, with military physicians carrying as much of the responsibility as they can. Under the Defense Department plan, dependents who could not be taken care of at military installations would be allowed to obtain their care from private sources, with the government paying almost all of the cost.

The American Medical Association agrees with the Defense Department that all dependents should receive medical benefits as nearly uniform as possible. However, AMA contends that wherever possible dependents should use private physicians and private hospitals, and that the military personnel and facilities should be employed only where civilian facilities are inadequate.



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Editorial Comment

ON PLUCKING A GOOSE

The effectiveness of Voluntary Health Insurance Programs in this country is seriously threatened. The threat to these plans stems from rising insurance costs due in part to the increased cost of hospital operation but principally to abuses and exploitation by insurance salesmen, patients, doctors, and hospitals.

With rising costs of operation, premiums must be increased; with increased premiums, buyer resistance increases; and there is danger of pricing this type of insurance out of reach of the very families who need it most.

If the voluntary health insurance plans fail, the government will surely step in with a compulsory plan involving regimentation of all concerned. But the voluntary plans need not fail; they need not fail if abuse and exploitation of them is curbed.

The extent of misuse of Blue Cross Insurance is revealed in a yet unpublished survey supervised by the Blue Cross Advisory Committee of the Michigan State Medical Society. Data tabulated from 12,102 completed charts studied in 25 Michigan hospitals (including 5 from Wayne County) were subjected to statistical analyses. When Blue Cross, commercial insurance companies, or the government paid the patient's bill, 33 per cent of hospital usage was classified as improper compared to 14 per cent when patients paid their own bills. According to the survey, almost 20 per cent of the Blue Cross insurance dollar is spent on unnecessary hospitalization.

The doctor who controls admission, treatment, and discharge of the hospital patient is in a key position to control abuses and exploitation of the voluntary health plans but he needs the help of the insurance companies, his patients, and the hospitals.

Blue Cross can help by more careful sales promotion. It can insist that its agents do not imply coverage not included in the policy. It would do well to give each subscriber a card welcoming him as a shareholder in this non-profit plan, but clearly stating that he cannot be admitted to a hospital for diagnosis only, that he cannot stay an extra day or two for the convenience of himself or his family, and that he cannot use his policy for nursing care in a hospital. If admissions of diagnostic workup continue, issuance of policies with deductible clauses similar to those designed for automobile collision insurance would simplify the physician's handling of unreasonable or oversold patients with Blue Cross coverage.

Hospitals can help by scheduling admissions earlier in the day, by eliminating delays due to bottlenecks in the ancillary services, delays in reporting tests, delays in notification of discharges, and by not winking at excessive amounts of expensive medicines released from the pharmacy at Blue Cross expense. Hospitals must not encourage patient overstays to keep the daily census high.

The patient can help by not demanding hospitalization for diagnostic procedures or special treatments such as x-ray or physiotherapy, and by not insisting on staying extra days because it is inconvenient to go home. But the patient as a shareholder must be apprised of the purposes and fair usages of Blue Cross not only by the doctor but by Blue Cross itself.

The physician himself must avoid admitting well patients for diagnostic or therapeutic convenience, must avoid prolonged preoperative treatment, must avoid permitting overstays for the convenience of patient, doctor, or hospital, and must avoid overusage of medications, and unnecessary laboratory tests. The physician more than anyone else is in a position to keep down the costs of unnecessary hospitalization.

Let us not permit the Blue Cross goose to be plucked by exploitation—the Blue Cross goose whose golden eggs have saved not only our private hospitals from insolvency but many a patient with catastrophic illness as well. Let us remember that every fraudulent claim for voluntary health insurance represents a contribution to the war chest of Socialism.—Milton R. Weed, M.D., *Detroit Medical News,* December 21, 1953.

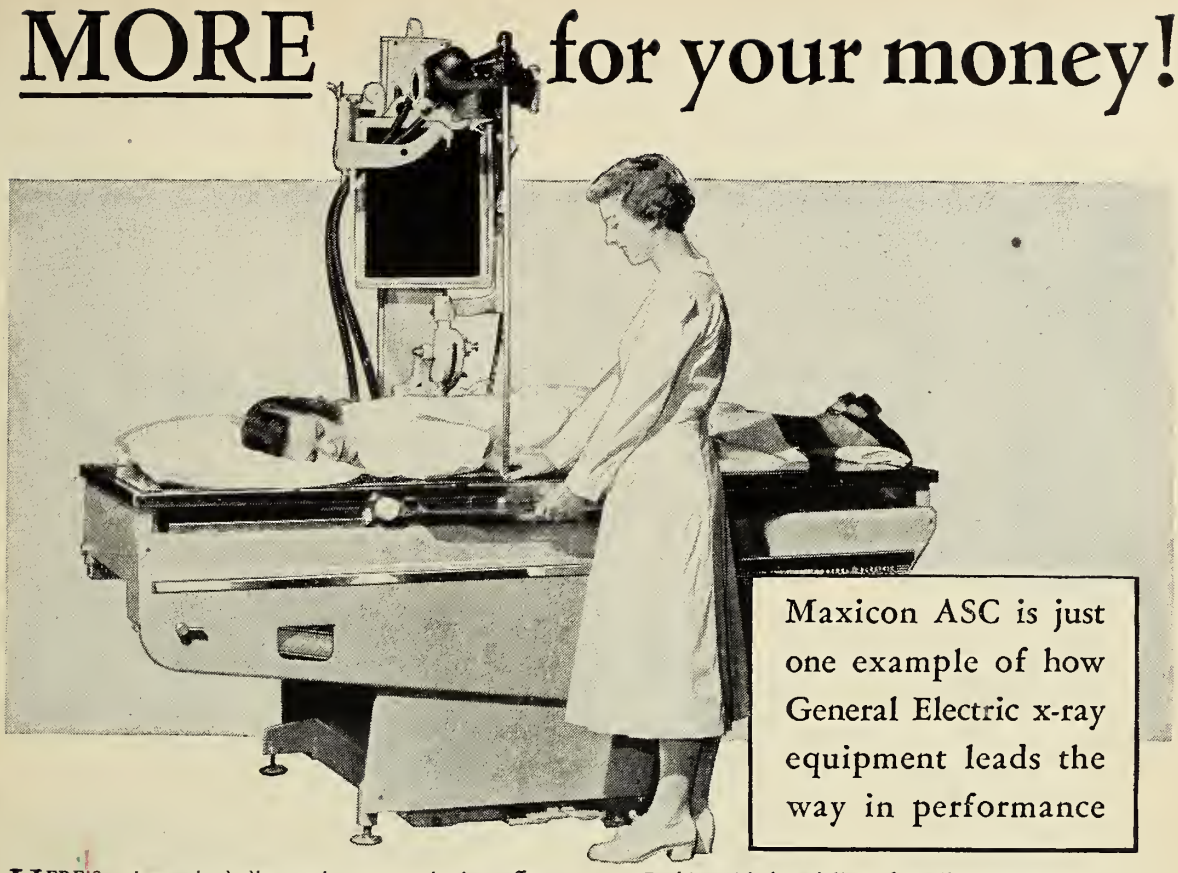
HOW ABOUT THE PEOPLE?

Among the obligations of citizenship is included the privilege of bearing arms in the defense of the nation. Those who have served the needs of the country in this manner are called veterans. There are three classes of veterans: those who gave the most they had to give—their lives—for all of us; those who sustained physical or mental damage as the result of this military service, and finally those who emerged from their period of service without physical or mental disease relatable to the bearing of arms.

There is nothing that the nation can do to replace the lives lost in its defense—except to pray that such losses have not been futile. Wisely and sympathetically it has offered everything it has to aid and rehabilitate the veteran whose disability is connected with his military life. But it has opened the door so widely to the veteran who finished his hitch without injury or defect that the Veterans' Administration, with 130,000 hospital

(Continued on Page 140)

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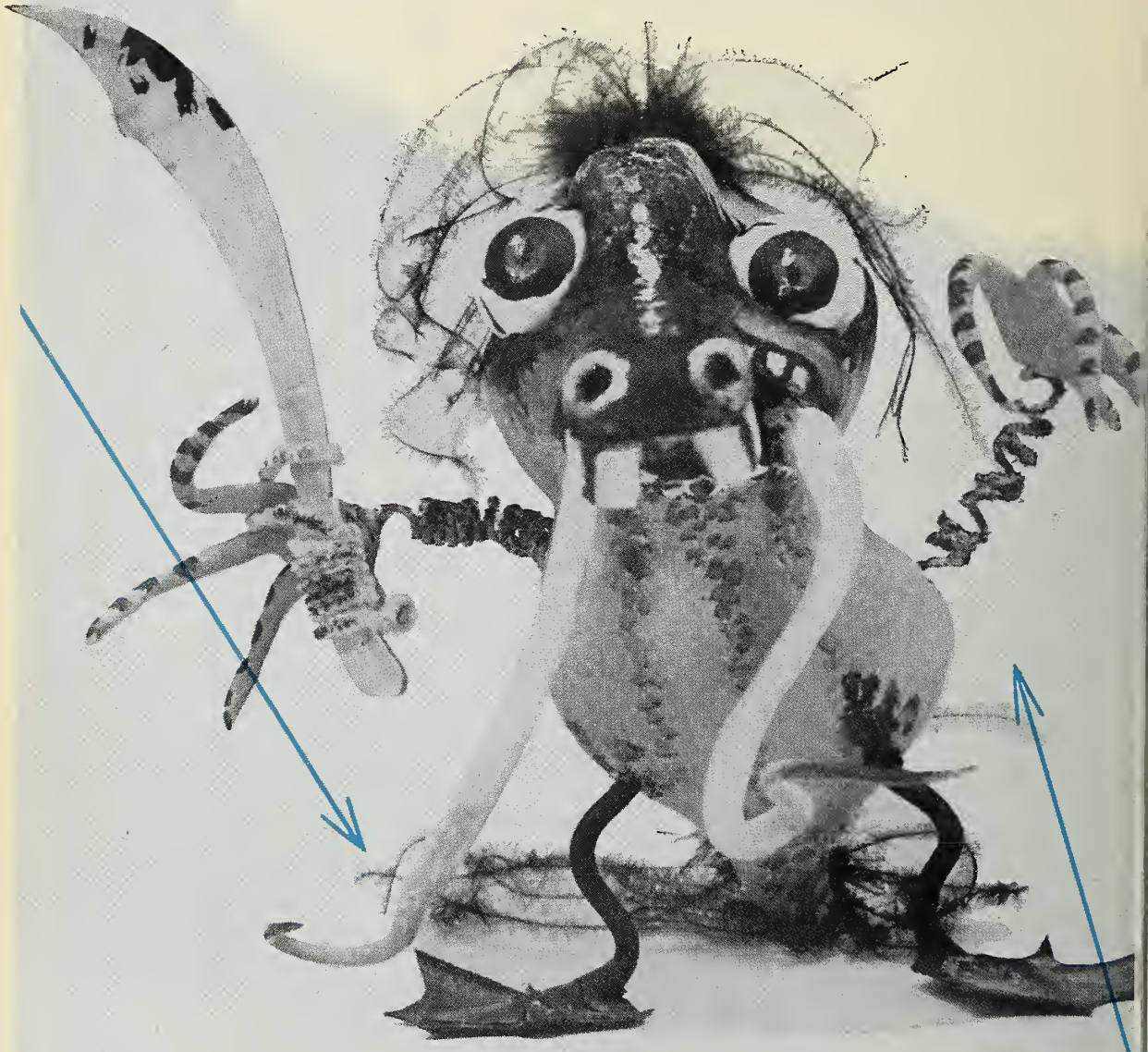
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Signal-light centering system for Bucky radiography	YES	NO	NO	NO
Provision for cross-table radiography	YES	NO	NO	NO
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1. Grigsby, M. E., et al., Antibiot. & Chemother., 10:1029, October, 1953.

FOR CHILDREN: Tasty, Stable *Pediatric* ERYTHROCIN Suspension

HOW ABOUT THE PEOPLE?

(Continued from Page 136)

beds now in operation, constructed with lavish disregard for cost and in direct competition with the nonveteran civilian for the essential technical hands which manage hospitals, has become a colossus with an insatiable appetite for the federal budget.

The problem has become so complex that the bureaucracy of the Veterans' Administration has lost sight of its primary function—to provide what is necessary to sustain and rehabilitate the veteran whose disability is service connected; every other function it has assumed in the past twenty years has little but political odor to it. It spent $17,000,000,000 on what was called vocational rehabilitation for the veteran of World War II—and his included courses in social dancing and the subsidy of fly-by-night academies. It has filled its 130,000 hospital beds with what is generally an 85% non-service connected populace, and blessed this with the sanctity of "training programs."

And then, as an ultimate demonstration of deep-grained ineptness, it ordered the veteran with a service-connected defect to leave the sympathetic care of his personal physician and join the line at the Veterans' Administration Clinic. The purpose of this is stated to be an economy. Everyone, including thoughtful relicts in Washington, know that this is ridiculous! VA cannot provide service in its clinics at three dollars a visit, which is what doctors in Michigan are receiving in Michigan's Home Town Care Program for Veterans. This state, with a smaller number of service-connected veterans than neighboring Illinois, provides more care for more veterans at less budgetary cost than is available at the behemoth clinic at Hines, Illinois. So the reason for reduction in the Home Town Care Program is a lie, simply a lie, and if our legislative representatives cannot clean up this muddle, we shall have to have new legislators.

Curiously, this ruling places the service-connected veteran at a disadvantage, which is certainly not the intent of the American people. If the Veterans' Administration honestly wants to effect economy, it can take the foot out of the door and stop the flow of non-service connected veterans (whom it has made into a special kind of citizen) into the fancy hospital beds and the special services which are denied every other taxpaying member of the nation.—WILLIAM BROMME in *Detroit Medical News,* October 19, 1953.

M.D. Registrations at Michigan's Medical Meetings

MICHIGAN STATE MEDICAL SOCIETY

Grand Rapids—September 23-25, 1953

Michigan Physicians Outside Wayne County (1,310): Anesthesiology, 24; Dermatology-Syphilology, 12; Gastroenterology-Proctology, 14; General Practice, 429; Medicine, 108; Nervous and Mental Diseases, 38; Obstetrics-Gynecology, 56; Ophthalmology, 39; Otolaryngology, 24; Pathology, 17; Pediatrics, 57; Public Health, 23; Radiology, 22; Surgery, 192; Urology, 19; Residents and Interns, 138; No specialty given, 98.

Wayne County Physicians (289): Anesthesiology, 4; Dermatology-Syphilology, 1; Gastroenterology-Proctology, 12; General Practice, 72; Medicine, 28; Nervous and Mental Diseases, 14; Obstetrics-Gynecology, 8; Ophthalmology, 9; Otolaryngology, 5; Pathology, 13; Pediatrics, 15; Public Health, 2; Radiology, 4; Surgery, 57; Urology, 9; Residents and Interns, 23; No specialty given, 13.

Physicians from Outside Michigan (62): Arkansas, 1; California, 3; Colorado, 1; District of Columbia, 2; Florida, 2; Illinois, 8; Indiana, 6; Maryland, 3; Massachusetts, 2; Minnesota, 4; Missouri, 1; Nebraska, 1; New York, 1; North Carolina, 1; Ohio, 10; Oregon, 1; Pennsylvania, 3; Rhode Island, 2; South Carolina, 1; South Dakota, 1; Utah, 1; Virginia, 1; Wisconsin, 3; Canada, 2; West Pakistan, 1.

MICHIGAN CLINICAL INSTITUTE

Detroit—March 11-13, 1953

Michigan Physicians Outside Wayne County (434): Anesthesiology, 7; Dermatology- Syphilology, 2; Gastroenterology-Proctology, 10; General Practice, 157; Medicine, 45; Nervous and Mental Diseases, 4; Obstetrics-Gynecology, 21; Ophthalmology, 6; Otolaryngology, 5; Pathology, 6; Pediatrics, 13; Public Health, 21; Radiology, 8; Surgery, 56; Urology, 5; Residents and Interns, 33; No specialty given, 35.

Wayne County Physicians (773): Anesthesiology, 17; Dermatology-Syphilology, 4; Gastroenterology-Proctology, 7; General Practice, 234; Medicine, 129; Nervous and Mental Diseases, 3; Obstetrics-Gynecology, 69; Ophthalmology, 18; Otolaryngology, 7; Pathology, 8; Pediatrics, 23; Public Health, 7; Radiology, 9; Surgery, 138; Urology, 9; Residents and Interns, 65; No specialty given, 46.

Physicians from Outside Michigan (68): Indiana, 4; Missouri, 1; North Dakota, 1; Ohio, 17; Pennsylvania, 1; Wisconsin, 1; Ontario, 43.

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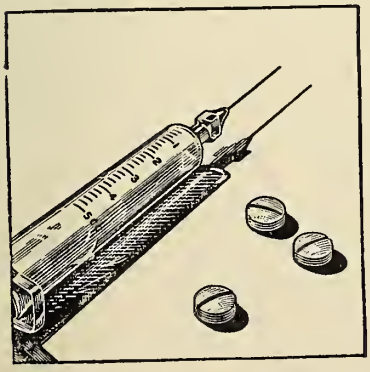
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Cancer Comment

EDUCATION MOST IMPORTANT CANCER CONTROL MEASURE

People should realize that constructive results do not flow merely from organization of a program. That is but the beginning of any accomplishment, educational or otherwise. It is the pattern to be followed in reaching the desired objective.

Today, too much reliance and emphasis is placed on the organization aspects of the cancer problem and not enough on the personal contact for education. One telling will not do the job. It must be repeated over and over. This is well illustrated by the true incident of the woman's club that had a talk on cancer and when the program chairman was approached two years later about another talk, she said: "We know all about cancer; we had a speaker two years ago who told us all about it, so what is the use of another talk on the same subject."

In the public school system of this country, the educational responsibilities are not discharged by "one talk" on any subject. Were that a fact, education would be a simple matter. Instead, years of school attendance and study are required, and of late years, adult education review programs are offered in many public school systems.

Education—general or health—is a never-ending process. Knowledge is not static and education cannot be static. The individual or group that "knows it all" about any subject only reveals ignorance which is concealed beneath a blustering exterior .

Likewise, the rendering of increased service to a few individuals in the community to meet their needs cannot compensate for the lack of education for all. At this time, there seems to be an increasing emphasis on service of all kinds to cancer patients, most of whom are incurable, rather than placing emphasis on education to prevent cancer, or, once acquired, its development to the advanced and incurable stage. Service will do little to control or lessen the incidence of cancer; education is the only known method of accomplishing this desirable end.

It would be as reasonable—and unreasonable—to assume that the present public educational system could be abandoned, permitting the rank and file of the population to grow up as illiterates with a few educated people in each community to supply the literate needs of the area through the munificence of some organization. as to expect the cancer problem to be solved by supplying unlimited services to the incurable cancer patient. Of course, service can be dramatized so as to arouse the sympathies of those with means for supporting such activities. It also gives opportunity for publicity for the giver or organizations acting as the service medium.

On the other hand, education is not dramatic; it is not emotion-arousing as is service. When it reaches into the emotional realm, it becomes propaganda rather than education. Its effectiveness is based on precept as well as example set by the educator. Success depends on optimism of belief in the efficacy of the educational method, persistence in repetition of principles and facts, and the stimulation of the individual to "carry on" in his educational experience in order to keep abreast of new information as it becomes available.

If education of the layman has been effective, he will have learned not to accept every public announcement about new information on cancer causes and cures until they have been evaluated by well known methods and accepted by responsible scientific groups. Every worker in the field of cancer research has the laudable and aspiring ambition to be the discoverer of the cause or cure of cancer, thereby assuring himself of enduring fame. However, the investigator who rushes into publicity after one favorable result from an experiment which proved his point 100 per cent would do well to wait for the second result; if this is unfavorable, his success drops 50 per cent.

Many of these fragmentary and inconclusive reports are stimulated by organizations to show the marvelous returns on their financial support of the research and to arouse their contributors to more generous future assistance.

The tragedy of these premature public announcements is that many cancer sufferers and their friends accept them as being of practical application. Their hopes are buoyed beyond all reason and their disappointment when they find nothing of practical value is bitterly tragic to behold. Such pronouncements and reports have no public educational value; they are but cruel propaganda and render a distinct disservice to the cause of cancer education and control by raising questions in the public mind as to the authenticity and worthwhileness of any and all educational efforts in that field.

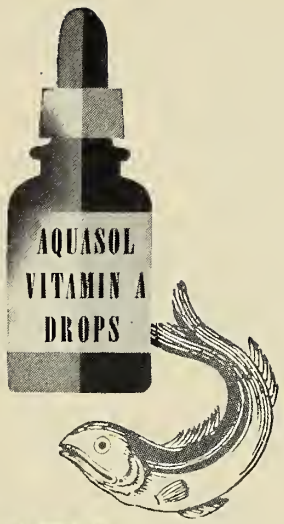
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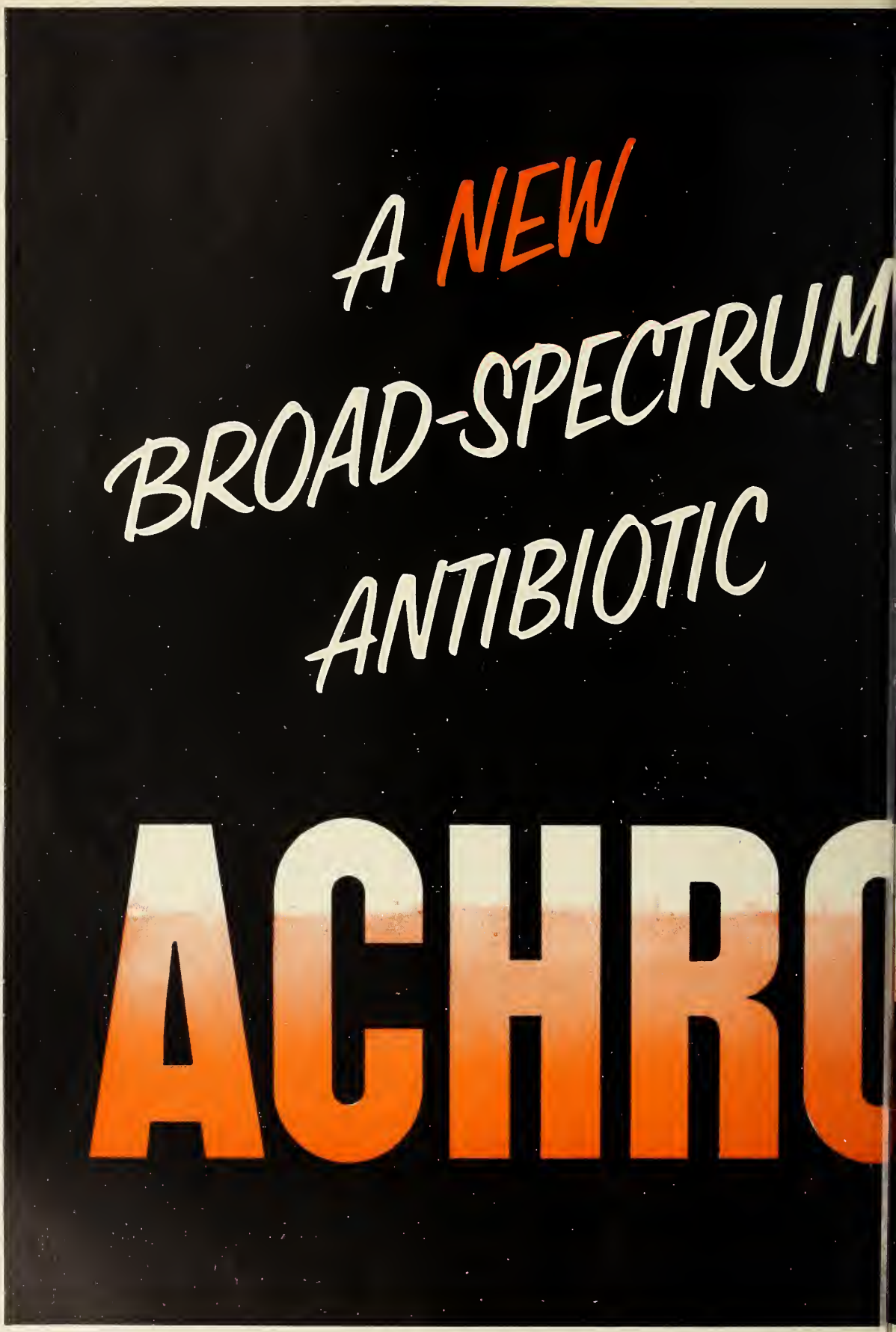
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PR REPORT

COUNTY MEDICAL SOCIETY public relations programs in the past have sometimes been rather difficult to pin down. The possibilities were diverse, but the over-all program has been introduced piecemeal over several years.

No longer is this the case. At the Annual County Secretaries and PR Conference, January 31, in Detroit, C. Allen Payne, M.D., MSMS PR Committee Chairman, laid out a PR program for county medical societies, in co-operation with MSMS, that was crystal-clear. Distributed with his talk was the new PR handbook, listing some twenty-six PR projects, most of them already under way in some form or another among Michigan's county medical societies.

PR for 1954—and beyond—was given a big boost. At the fingertips of each county medical society PR chairman and officers is a printed guide, outlining PR activity in three major categories, detailing the purpose of each project, and giving each local society the foundation for a well-rounded program.

NO COUNTY IS EXPECTED to carry out all twenty-six projects, Dr. Payne explained. Some are designed primarily for large counties, some for less-populous areas. But for adequate PR effort, each county society should be operating one or more projects in each of the three major divisions: (1) Improvement of Medical Services; (2) Education of the Public in Respect to Health and Medical Practice; (3) Organization for Action to Maintain Medical Freedom.

Major emphasis of MSMS PR activity in 1954 is to be directed towards service to county medical societies. This follows since some of the most important phases of PR for the entire medical profession, to be successful, must be carried out in the local community with the active interest of the individual doctor of medicine.

Here is the list of PR projects designed for county medical societies in 1954, as outlined in the new PR handbook:

I. IMPROVEMENT OF MEDICAL SERVICES

1. The Business Side of Medical Practice
2. 24-Hour Medical Service
3. Blue Cross-Blue Shield Relationship with the Medical Profession
4. M.D. Procurement and Placement
5. Medical Student Procurement and Medical Scholarships
6. The Recruitment of Medical Associates
7. A Family Doctor For Every Family
8. The Establishment of Health Centers
9. The Building and Expansion of Hospitals
10. The Administration, Reporting and Referral of Indigent County, State and Federal Patients
11. Providing Means to Maintain Highest Standards in the Administration of Medical Practices

II. EDUCATION OF THE PUBLIC IN RESPECT TO MEDICAL PRACTICE AND HEALTH

12. Develop and Maintain a Mutual and Friendly Understanding Between the Press and the Medical Profession
13. Use of Pamphlets
14. Effective Use of Radio and TV by the Medical Profession
15. Medical Forums
16. Adult Education Programs
17. Use of Motion Pictures for the Public
18. The Annual Physical Check-Up

III. ORGANIZATION FOR ACTION TO MAINTAIN MEDICAL FREEDOM

19. Indoctrination of Medical Students, Interns, Residents and New Members
20. Strengthening Medical Societies
21. Co-operation with other Voluntary Organizations
22. Co-operation with Government Agencies
23. MSMS Handbook
24. Co-operation with Professions and Vocations Whose Science or Work Borders Upon Medical Science and Medical Practice.
25. Increasing the PR Value of the Woman's Auxiliaries and the Medical Assistant Societies
26. A Legislative Relations Program

FEDERAL GOVERNMENT STATISTICS

During the twelve-month period ending October 31, civilian employment in the federal government was reduced by 196,941, bringing the total down to 2,371,113. The reduction in October, 1953, alone was 28,697. Reductions in federal employment thus far this fiscal year—since July 1, 1953—totalled 96,527.

The task of weeding out security risks in federal agencies continues. The Veterans Administration announced on December 2 that 134 of its employes have been separated from their jobs as security risks during the first six months of President Eisenhower's employe security program.

* * *

U. S. Chamber of Commerce compilations show that there are 116,743 units of government in the United States today. These include the federal government, governments of the forty-eight states, 3,049 counties, 16,778 municipalities, 17,202 townships, 67,346 school districts, and 12,319 special districts of various types.

These figures tell only part of the story. At the federal level alone, there are 2,117 distinct segments of government. Keeping government under control, even in terms of numbers of agencies, is going to be a continuing struggle.

—From Congressman Paul Shafer *News Letter*



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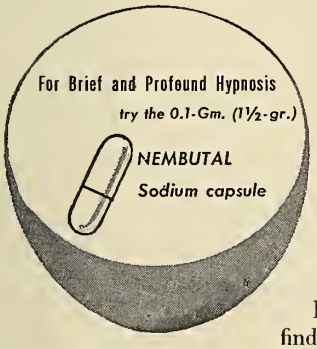
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Michigan Registrations in Medicine

The bi-annual meeting of the Michigan State Board of Registration in Medicine held on October 13, 1953, resulted in the unanimous re-election of the following officers: President, Elmer W. Schnoor, M.D., Grand Rapids; Vice President, E. C. Swanson, M.D., Vassar; Secretary, J. Earl McIntyre, M.D., Lansing.

Sergeant Raymond M. Sweet, recently of the Michigan State Police, was appointed Investigating and Law Enforcing Officer of the Board as of October 1, 1953, to succeed Captain LeRoy A. Potter, of the Michigan Department of Health, who has efficiently and faithfully served the Board for twenty-five years on a part-time basis through the courtesy of the State Health Department. Until the past few years, he received no extra compensation or salary for his services because the Legislature would not grant the necessary monies in the budget. Captain Potter has suffered several severe and serious illnesses during the past three years and has now reached the mandatory age of retirement. The Captain was made an honorary life member of the Michigan State Medical Society last year, and his many friends wish him a long comfortable life to enjoy it.

Members of the medical profession who wish to file complaints against any person or persons for practicing medicine without a license or any other violation of Act 237, Public Acts of 1899, as amended, the Medical Practice Laws of Michigan must make a typewritten and signed complaint containing the names and addresses of all people concerned which must be mailed to the Michigan State Board of Registration in Medicine, 201-2-3-4 Hollister Building, Lansing, Michigan.

The following names include those doctors of medicine, and their schools, who were registered and licensed by examination, special qualifying examination or endorsement up to October 28, 1953, beginning with number 20,276 and ending with number 20,563.

By Endorsement.—Alvin Seligson *(University of Arkansas)*, John Stewart Wisely *(McGill) (New York)*, Cornell Greava, Jr., *(Evangelists) (National Board Special Examination)*, Valdo Andrew Getting *(Harvard)*, Alfred Hamady *(University of New York) (National Board and Special Examination)*, John A. Strouble *(Indiana University) (Indiana)*, Keith Stuart Wemmer *(Ohio State University) (Ohio)*, Robert A. Slabaugh *(University of Nebraska)*, Phillip James Moore *(University of Illinois)*, Frank L. Pettinga *(Boston) (National Board and Special Examination)*, Richard John Schilling *(Indiana University) (Indiana)*, Kazuko Bill *(Washington Woman's Medical College of Pennsylvania) (Pennsylvania) (Special Examination)*, Robert Jewett Fry *(Temple) (National Board and Special Examination)*, John Sutphin Tytus *(Ohio State University) (Ohio)*, James Kaler, Jr. *(Indiana University) (Indiana)*, John Alvord Churchill *(University of Pennsylvania) (Pennsylvania)*, Thomas Wm. Kavanagh *(University of St. Louis) (Missouri)*, Robert George App *(University of Indiana) (Indiana)*, John Hinkle Tuzadre *(Duke) (Pennsylvania)*, Neal Caldwell Brady *(George Washington) (National Board and Special Examination)*, Harry Jockary Mellins *(University of New York) (Pennsylvania)*, John Lewis Doyle *(University of Louisville) (Kentucky)*, Edward J. Salmeri *(University of New York) (New York)*, Melvin Lawrence Selzer *(Tulane) (Tulane)*, John F. Wiltberger *(Ohio State University) (Ohio)*; George Bernard Loan *(Georgetown) (National Board and Special Examination)*, Thomas Warrall Watkins *(Jefferson) (New Jersey)*, Wm. Albert Yancey *(University of Louisiana) (Louisiana)*, Richard Leo Novak *(St. Louis University) (Missouri)*, Julian Ray Youmans *(Emory) (Georgia)*, Lawrence Sevallin Lackey *(University of Kansas) (Kansas)*, Harry LeRoy Munson *(University of Virginia) (Virginia)*, Burdette M. Berens *(University of Iowa) (Iowa)*, Robert Eugene Birk *(University of Rochester) (National Board and Special Examination)*, Frank S. Damazo, Jr. *(Evangelists) (National Board and Special Examination)*, Richard Ben Moore *(University of Indiana) (Indiana)*, Stanis S. Melendez *(Howard) (Illinois)*, John T. Rogers *(Cornell) (Kentucky)*, James Wm. McManus *(Georgetown) (Maryland)*, Herbert M. Hiller *(Columbia) (National Board and Special Examination)*, John M. Wood *(University of Vermont) (Vermont)*, Carroll L. Jensen *(Evangelists) (California)*, Joseph E. Cooper *(Temple) (North Carolina)*, David K. *Peshka (Evangelists) (California)*, Charles R. Donley *(University of Ohio) (Ohio)*, Henry Wm. Post *(Tulane) (Louisiana)*, Jack S. Guyton *(Howard) (Maryland)*, Gustave G. Prinsell *(Columbia) (National Board and Special Examination)*, Wm. W. Kimbrough *(Michigan University) (Ohio)*, James H. Millard *(University of Cincinnati) (Ohio)*, Leonard L. DeLella *(University of Georgetown) (National Board and Special Examination)*, Clarence B. Kimbrough *(Meharry) (Kentucky)*, Paul E. Ruble *(Vanderbilt) (Tennessee)*, John W. Wolfe *(University of Tennessee) (Ohio)*, Dale LeRoy Kessler *(University of Cincinnati) (Ohio)*, James V. Fentress *(Vanderbilt) (Tennessee)*, Ruth M. Ellis *(University of Boston) (National Board and Special Examination)*, Charles W. Dunn *(Stritch) (Illinois)*, Edward C. Nash *(University of Vermont) (National Board and Special Examination)*, Joseph M. Garland *(Yale) (National Board and Special Examination)*, Raymond J. Winfield *(University of Washington) (National Board and Special Examination)*, Charles Wm. Bush, Jr. *(University of Boston) (Special Examination and National Board)*, Wm. F. Kessler *(Jefferson) (New York)*, Raymond J. Echt *(University of Illinois) (Illinois)*, Clinton A. Jackson *(Meharry) (Tennessee)*, Woodrow H. Pickering *(George Washington) (National Board and Special Examination)*, Warren G. Stamp *(University of Iowa) (Iowa)*, Raymond F. Guese *(Creighton) (Iowa)*, Peter P. Brue *(Georgetown) (District of Columbia)*, Erwin G. Pear *(Southwestern) (Texas)*, Richard A. Steinbach *(University of Georgia) (Georgia)*, Andrew Bedo *(University of Boston) (National Board and Special Examination)*, Keith McElroy *(University of Toronto) (Special Examination and Naitonal Board)*, Carl A. Galiardi *(Yale) (National Board and Special Examination)*,

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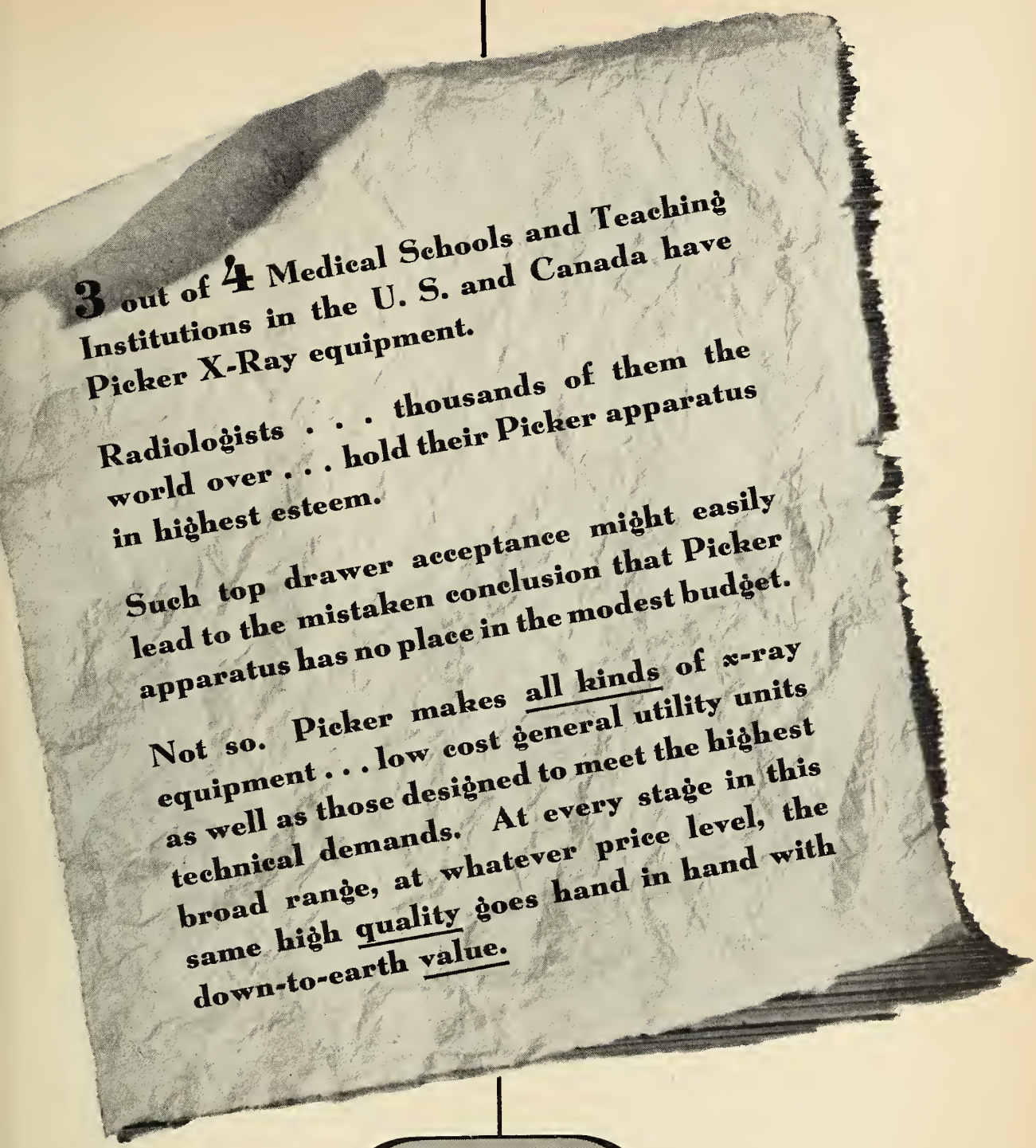
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Bone Changes in Leukemia

By Philip W. Dorsey, M.D.

Flint, Michigan

LEUKEMIA, for practical purposes, may be considered a form of cancer of the hemopoietic organs. The disease affects primarily the lymphatic and reticulo-endothelial systems and consequently the bone marrow, resulting in a disorderly overproduction of leukocytes. It may be manifest by an increase in the number of leukocytes in the circulating blood, but occasionally it is accompanied by a normal or subnormal blood picture. Leukocytosis with or without the presence of young forms, however, is not pathognomonic of leukemia. It can be due to various causes such as infection (leukemoid reaction) or to circulating tumor cells (leukosarcoma).

The most important microscopic changes are found in the bone marrow. In lymphatic leukemia there is a homogeneous replacement by the lymphoid elements. In the myelogenous types the bone marrow shows an increase in the myeloid elements with numerous eosinophilic myelocytes and a shift to younger forms with a striking decrease in the percentage of nucleated red cells. Proliferation by way of the Haversian canals may extend to and lift the periosteum. Because of these infiltrative changes, pressure atrophy and rarefaction of the trabeculae with subsequent destruction of the cortex can occur.

The diagnosis of leukemia is relatively easy when the characteristic clinical picture is present. The manifestations of the disease, however, are frequently atypical and may present considerable difficulty, particularly in the aleukemic form. Roentgen examination of the skeleton, in addition to the clinical and laboratory findings, may be helpful in arriving at the correct diagnosis.

A review of 249 case histories of leukemic patients was compiled by the author in an attempt to correlate the clinical features of the disease with the roentgen changes occurring in the skeleton. It was the intent of this survey to determine what the changes were, as well as the percentage of patients showing them. One hundred and thirty-two of these fell into the lymphatic group, 114 in the myeloid group, and three in the monocytic group. Of this number, seventy-two patients (29 per cent) had a complete or partial skeletal survey. It is apparent, therefore, that it would be statistically incorrect to correlate the number of patients showing bone involvement with the total number seen. Likewise, comparing the number of patients shown to have bone involvement with those adequately radiographed would not give a correct incidence because this would represent a select group, that is, it would be made up of those in which bone involvement was suspected clinically.

Incidence (Table I)

Table I shows that 30 per cent of the patients with lymphatic leukemia who were studied with radiograms demonstrated bone changes when adequately studied. The incidence was found to be highest in the aleukemic group which showed five cases with bone involvement in five cases studied.

Four of the remaining eight cases were of the acute and subacute type. In Craver and Copeland's similar series published in 1935, an incidence of 7 per cent was reported.[2] However, there is fairly close correlation when the twelve positive cases are compared with the total number of lymphatic leukemia patients; the percentage drops to 9 per cent.

TABLE I

	Total Cases	Adequate Bone Survey Negative	Chest Only	Adequate Bone Survey Positive	Positive Cases vs. Cases c Adequate Study	Sex Positive Cases	Average Age Positive Cases in Years	Length of Life After Bone Changes in Months
Acute and sub-acute lymphatic leukemia	34	8	22	4	4/12 33%	2 m 2 f	3.4	2.5
Chronic lymphatic leukemia	89	19	67	3	3/22 14%	3 m 0 f	48.3	7.0
Aleukemic lymphatic leukemia	9	0	4	5	5/5 100%	5 m 0 f	6.1	2.5
Total	132	27	93	12	12/39 30%	10 m 2 f		
Acute and sub-acute myelog. leukemia	43	9	34	0	0	0 m 0 f	0	0
Chronic myelog. leukemia	69	22	46	1	1/23 4%	0 m 1 f	45	1
Aleukemic myelogenous leukemia	2	0	1	1	1/1 100%	0 m 1 f	20	1
Total	114	31	81	2	2/33 6%	0 m 2 f		
Acute monocytic leukemia	3	0	3	0	0	0		
Sum Total	249	58	177	14	14/72 20%	10 m 4 f		

TABLE II

A—Number studied with radiograms B—Number showing changes

	Positive Cases																					
	Skull		Verte-brae		Humeri		Ulna		Radius		Pelvis		Femur		Tibia		Fibula		Flat Bones		Short Bones	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Acute and subacute lymphatic leukemia	2	1	2	0	4	3	3	3	3	3	2	1	4	3	3	2	3	2	4	2	3	3
Chronic lymphatic leukemia	0	0	3	1	1	1	0	0	0	0	4	3	3	3	1	0	1	0	2	1	0	0
Aleukemic lymphatic leukemia	3	1	4	1	5	4	3	3	3	3	5	1	5	4	5	4	5	3	5	2	1	1
Total	5	2	9	2	10	8	6	6	6	6	11	5	12	10	9	6	9	5	11	5	4	4
Acute and subacute myelogenous leukemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chronic myelogenous leukemia	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0
Aleukemic myelogenous leukemia	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	0	0	0
Total	0	0	1	0	0	0	0	0	0	0	1	1	2	2	1	1	1	1	2	0	0	0
Acute monocytic leukemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum Total	5	2	10	2	10	8	6	6	6	6	12	6	14	12	10	7	10	6	13	5	4	4

Bone changes in the myeloid group were present in 6 per cent of the adequately studied patients, and 1.8 per cent of the total number of leukemic patients. Craver and Copeland reported changes in 1.2 per cent of their cases. It is interesting to note that only two patients were found to have aleukemic myelogenous leukemia, and one of these showed bone changes. It seems therefore that, as in lymphatic leukemia, the greatest bone changes are present in the aleukemic group.

Children under six years of age showed the most common changes. Nine of the twelve patients with lymphatic leukemia were in this age group. The reasons for this are apparent when it is considered that all the bone marrow is active in children while in adults activity is generally limited to the sternum, ribs, and vertebrae. The periosteum in children is less firmly attached to the shafts of the long bones than it is at a later age. Bone metabolism is more active and hence may be more easily disturbed in growing bones. The reserve blood-forming capacity, beyond the normal demands, is comparatively less in children so that any overload results in an expansion and increase in the bone marrow with subsequent atrophy and erosion of the cortex.

Bone Distribution (Table II)

Anatomically the long bones were found to be most often involved, especially in the metaphyses. The ulnae, radii, humeri, and femora were affected in over 75 per cent of the positive cases when these structures were examined. The tibiae, fibulae, pelvis, and skull were next most frequently involved in that order (Fig. 1). The vertebrae showed a higher incidence of involvement in adults than in children.

TABLE III. X-RAY FINDINGS IN FOURTEEN POSITIVE CASES

	Demineralized	Moth-Eaten	Transverse Lines	Periosteal Elevation	Sclerosis
Acute and subacute lymphatic leukemia	3	2	2	2 1?	1
Chronic lymphatic leukemia	1	3	0	0	0
Aleukemic lymphatic leukemia	4	3	3	1 1?	1
Total	8	8	5	3 2?	2
Acute and subacute myelogenous leukemia	0	0	0	0	0
Chronic myelogenous leukemia	1	1	0	1?	0
Aleukemic myelogenous leukemia	0	1	0	0	0
Total	1	2	0	1?	0
Acute monocytic leukemia	0	0	0	0	0
Sum Total	9	10	5	3 3?	2

Roentgen Features (Table III)

1. *Bone Destruction.*—This was the most common feature in most of the cases studied and is a manifestation of expansion of the marrow cavity by leukemic infiltration. Radiologically this change may be localized to one part of a bone or unevenly distributed throughout the length of the shaft. It is detected as irregular areas of decreased density and destruction. The cortex may be thinned in many areas, the bone density is reduced, and the trabecular markings appear more prominent because of absorption of some of the finer trabeculae. Many cases were seen in which the only roentgen finding appeared to be demineralization. These cases have not been included in the list of positive cases on this one isolated finding alone. However, osteoporosis may represent the earliest change. Sixty-two per cent of the positive cases showed moth-eaten areas of destruction, most marked near the metaphyses; a greater percentage showed concomitant osteoporotic changes.

2. *Transverse Lines of Diminished Density.*—A narrow zone of diminished density just proximal to the metaphyses of the long bones, most marked where the growth is most rapid, was a prominent feature in many cases. The cause for this is not clear since microscopic sections have shown infiltrative masses of leukemic cells here, but the degree of infiltration was no greater than elsewhere in the bone. This band of diminished density is not a feature of leukemia alone. It may be seen in scurvy, and has been reported in cases of septicemia and meningitis. It most likely reflects an alteration of bone growth as a result of a disturbance involving the entire body. This phenomenon was first described by Baty and Vogt in 1935. They reported its occurrence in 70 per cent of a total

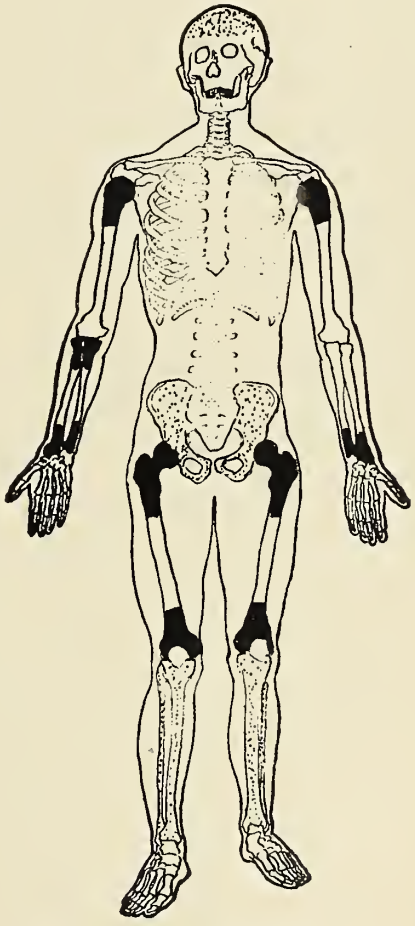


Fig. 1. Skeletal distribution for all cases: skull, 40 per cent; vertebrae, 20 per cent; humeri, 80 per cent; ulnae, 100 per cent; radii, 100 per cent; pelvis, 50 per cent; femora, 86 per cent; tibiae, 70 per cent; fibulae, 60 per cent; flat bones, 38 per cent; short bones, 100 per cent. Key: solid area, 75-100%; dotted area, 40-75%; white area, less than 40%.

of forty-three patientss.[1] Eighty-six per cent of the patients were under six years of age. In the series studied by the author it was present in approximately one-third the positive cases. All of the patients were under six years of age and all had lymphatic leukemia.

3. *Periosteal Reaction.*—Periosteal elevation with new bone formation along the shafts of the long bones appears as a linear area of extra density parallel to the shaft but separated from it. The new bone may be smooth in outline and of fairly uniform density or it may be irregular. Actually it represents leukemic infiltration under the periosteum, elevating it, and stimulating new bone formation. Similar changes have been found involving the sternum, skull, and vertebrae in autopsy studies. Roentgenologically, however, it is usually demonstrable only along the shafts of the long bones. This finding was present in three of the fourteen positive cases and suspected in three others. The three cases showing definite periosteal elevation were all of the lymphatic type and all were under three years of age.

4. *Bone Sclerosis.*—Osteosclerotic changes occur in leukemia as noted by Mendl and Saxl.[4] They are, however, less common in children and are late manifestations, probably an attempt at healing of the earlier destructive process or may be the result of maturation of leukemic cells into osteoblasts.[3] Localized osteosclerosis was present in two cases, both of the lymphatic variety. The respective age of these patients was seven and fifty-five. The long bones appeared to be free of this change which was localized to the pelvis, one vertebra, and one metacarpal bone. Considerable disagreement exists concerning the relationship of osteosclerosis as seen in chronic myelogenous leukemia and a condition first described by Rosenthal and Erf in 1943 as myelofibrosis or myelosclerosis.[5] The latter resembles chronic myelogenous leukemia in many respects, especially the peripheral blood findings and organic infiltration. The clinical course and mode of onset, however, differ considerably from that of myelogenous leukemia. Many feel that it is primarily a neoplastic disease evidenced by myeloid metaplasia, and that it is a premalignant stage of leukemia which eventually terminates as such. The disease generally passes through a series of stages with the final picture that of a full blown leukemia. It is possible, however, that one may have osteosclerosis with a leukemic blood picture without going through the preliminary stage of polycythemia. Not all cases of osteosclerosis develop into leukemia.

Formerly, Albers-Schonberg's disease was included in this category. It is generally agreed now that this represents an entirely different disease entity. The transformation of the medullary portions of the bone into dense compact bone is a result of a defect in the development of the mesenchymatous elements, rather than a fibroblastic reaction to a stimulus, with extramedullary hematopoeisis greater than could be expected from the degree of marrow replacement. Roentgenologically, the early changes in myelosclerosis are widening and increased density of the trabeculae. This is followed by an irregular deposition of bone throughout the marrow cavity. The endosteum eventually merges with the marrow cavity but the bone cortices are not thickened as in Albers-Schonberg's disease. The degree of change is more or less uniform throughout the skeleton; only in the skull is it difficult to detect distinct abnormalities. Regardless of the mode of onset, these cases usually eventuate into leukemia.

Duration of Life Following Bone Changes

In all cases the patients died within a few months after bone changes had been detected.

Differential Diagnosis

1. In children a roentgenological differential diagnosis must be made from neuroblastoma with generalized metastases which may simulate the advanced stages found in leukemia. In both diseases films of the skull may show a diffuse granular mottling and the cranial sutures may be separated because of increased intracranial pressure. One of the most important differential points is found in the distal bones of the extremities. The metastases of neuroblastoma involve particularly the proximal ends of the proximal long bones, and much less, if at all, the bones distal to the elbows and knees. The distribution is less symmetrical in neuroblastoma. The degree of destruction is often greater and periosteal reaction may be of the perpendicular type. There is usually a prominent mass not resembling spleen in the abdomen and neuroblastoma is distinctly uncommon beyond puberty. The blood picture is of basic importance.

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Topical Skin Therapy with an Antihistaminic Tar Ointment

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and
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IN THE LOCAL therapy of chronic skin eruptions, the combination of two or more effective agents, in a suitable ointment base, frequently affords the patient far greater symptomatic benefit than it is possible to obtain from any one drug employed alone. Among the great number of medicaments recommended and employed in topical therapy, crude coal tar, or one of its derivatives, is generally acknowledged to be one of the most valuable in an extremely wide range of cutaneous disorders. Another group of medicaments which in a relatively brief period have found very wide application in local treatment of pruritic dermatoses are the antihistaminic drugs. While each of these therapeutic agents may prove beneficial in the same condition when used separately, their mechanism of action differs. It would not seem illogical therefore to use them together with the expectation of at least an additive effect, and in the hope of a possible synergistic action. The present study was undertaken to determine the effectiveness of a combination of crude coal tar extract (5 per cent liquor carbonis detergens) and a potent antihistaminic agent (2 per cent pyrilamine maleate) incorporated in an emulsified hydrophilic base in the topical therapy of chronic eczematous and certain papulo-squamous dermatoses. Topical therapy can by no means be deemed curative in such chronic dermatoses, since some, notably the atopic and contact eruptions, are more permanently benefited by control of underlying sensitizations. Symptomatic local therapy is necessary, however, to alleviate discomfort and to promote healing of the skin, until a longer lasting solution of the problem can be attained.

Sixty-seven patients in various age groups who presented chronic or recurrent eruptions of several months to many years duration were treated with the antihistaminic-tar combination. Fifty-four of these cases could be classified under the heading of atopic dermatitis, while the remainder were cases of contact dermatitis, nummular-type eczema, seborrheic dermatitis, and psoriasis. Treatment with the combination ointment was generally initiated during subacute or chronic stages, and avoided during periods of acute difficulty. Wherever possible, the effectiveness of the various ingredients alone, as well as in combination, were compared in the same patient. Four ointments were used for this comparison. One composed of the hydrophilic base alone; another consisting of the base and coal-tar; a third made of the base and antihistaminic, and finally the complete combination. In some cases it was possible to compare their effectiveness by treating separate areas of involvement simultaneously in the same patient. In other instances, it was more feasible to alternate the use of various preparations.

Patients, or their parents, were instructed to apply the preparation to affected areas two or three times daily. In cases of extremely widespread dermatitis the areas of greatest involvement were selected for treatment. Patients were specifically instructed to discontinue the application in the event of increased irritation of the skin, or aggravation of the eruption. The period of use depended to a great extent on the results obtained. It was continued for at least one week, except where untoward results occurred, and for as long as the patient appeared to derive benefit. In several instances, it is still being used after more than six months of almost daily use.

In evaluating results, improvement in the dermatitis of more than 50 per cent with associated relief of discomfort and itching was considered an excellent response. Improvement of 25 to 50 per cent was rated fair, and less than 25 per cent was deemed poor. When benefit occurred, it was usually evident within two to three days, although in some instances slower involution took place, with improvement noticeable only after four to seven days of regular application.

As will be noted in Table I, the results were excellent in the majority of those with atopic eczema. Thirty-five out of fifty-four patients with this condition, in various age groups, attained benefit from the local use of this combination. This consisted in rapid alleviation of pruritus, followed by marked improvement in the character of the skin after a few days of use. In the small number

The combination ointment in this study was supplied by the Tarbonis Company, Cleveland, Ohio, under the trade name "Histar."

TABLE I. USE OF COAL TAR ANTIHISTAMINE OINTMENT

Diagnosis	Number of Cases	Excellent	Fair	Poor	Aggravated
Atopic Eczema—Infantile type (age 6 months to 2 years)	12	6	2	1	3
Atopic Eczema—Childhood type (age 2 to 12 years)	20	13	4	3	—
Atopic Eczema—Adolescent and adult type (age 12 years and older)	22	16	3	3	—
Eczematous—Contact-type dermatitis	2	1	—	1	—
Seborrheic dermatitis of ears	2	2	—	—	—
Psoriasis	6	4	—	2	—
Nummular Eczema of hands and forearms	3	2	—	1	—
Total	67	44	9	11	3

of cases of eczematous contact-type dermatitis, seborrheic dermatitis, psoriasis, and nummular-type eczema of the hands and forearms, the results were likewise favorable in the majority. Comparison of the combination ointment with its separate ingredients indicated that the combination was generally more effective than any of its components. An analysis of the records of forty-four patients who obtained an excellent response from the combination showed that 27, or 61 per cent, noted greater benefit from the combined preparation than from any of the individual ingredients. Ten patients were benefited equally by the antihistaminic component, while seven others found the coal-tar ointment as effective as the combination.

In the entire groups of sixty-seven patients treated, only three, all infants, showed aggravation of the dermatitis attributable to the topical medication. In each instance, coal-tar was found to be the offending ingredient. All were able to tolerate the antihistaminic component and the ointment base without difficulty.

Discussion

The cases included in the present study are those where both coal-tar and antihistaminics are frequently desirable for local therapy. Crude coal-tar has been long considered one of the most valuable local agents in the treatment of cutaneous diseases, and has enjoyed especially wide application in the symptomatic management of atopic eczema and psoriasis as well as many other common dermatologic disorders. In moderate strengths, it is soothing and anti-pruritic, and is reported to have anti-acanthotic, keratoplastic, vasoconstrictor, as well as anti-parasitic effects.[4] While crude coal-tar ointments are frequently objectionable because of their color and staining characteristics, such derivatives as liquor carbonis detergens in an emulsified hydrophilic base are much more pleasant to use and aesthetically acceptable to the patient or patient's family. Coal-tar preparations are generally well tolerated when applied in moderate strengths to limited areas of skin which are not acutely inflamed. As evidenced by three patients in this series, allergic eczematous sensitization occurs in a small percentage. It is also well to point out that photosensitization may follow the use of coal-tar, and direct exposure to the sun should be avoided during the treatment period.

In the relatively brief period since their introduction, antihistaminic agents have earned an important place in the symptomatic management of pruritic dermatoses. When topically applied in suitable vehicles, they are markedly anti-pruritic, and possess local anesthetic properties which are several times that of procaine.[3] Allergic eczematous sensitization and primary irritation are known to occur more frequently with certain members of this group than with others.[2] Pyrilamine maleate (dimethyl - aminoethyl - methoxybenzyl - aminpyridine) ranks high among antihistaminic preparations in point of therapeutic effectiveness, and in 2 per cent concentration exerts a high degree of local action with a minimum of primary irritation or eczematous sensitization.

The vehicle used to incorporate active drugs for topical therapy must vary with the chemical characteristics of the medication as well as with the type of dermatologic condition being treated. In acute stages, compresses and shake lotions are best tolerated, but as the condition becomes subacute or chronic, the skin is better able to tolerate medicaments incorporated in pastes and ointments. Hydrophilic ointment bases present several advantages over other types of ointments. They are easier to apply and are not so noticeable on the skin. They are usually quite stable and non-irritating, and of low sensitizing potential. In the present study where it was desirable to use two medicaments of varying solubility, such as a

water-soluble antihistaminic, and coal-tar which is insoluble in water, this type of vehicle is of additional advantage.[1]

Summary

1. A combination of crude coal-tar extract (5 per cent liquor carbonis detergens) and an antihistaminic agent (2 per cent pyrilamine maleate) incorporated in an emulsified hydrophilic base was used in the local therapy of sixty-seven patients with chronic eczematous and papulo-squamous dermatoses. The symptomatic response in forty-four cases was considered excellent; in nine others a fair response was noted; while only eleven patients in this series were not benefited.

2. Only three patients in the entire series failed to tolerate the combination. Each was found sensitive to the tar component, and were able to tolerate the antihistaminic and ointment base without difficulty.

3. Comparison of the combination with the ointment base containing either the coal-tar ingredient or the antihistaminic drug, indicated that the combination was generally more effective than any of its components.

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BONE CHANGES IN LEUKEMIA

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2. Cancer metastasis of the mixed productive and destructive type, as well as lymphosarcoma and Hodgkin's disease may simulate leukemic involvement of bone. The transverse bands of diminished density are absent in these states and the clinical picture accompanying these conditions usually makes the diagnosis evident. Ewing's tumor occasionally will resemble a solitary lesion of leukemia in bone and when this disease becomes widespread the resemblance may be strengthened. Again clinical and laboratory findings may have to provide the diagnosis in rare instances. The same is true for the so-called histiocytoses.

3. Less frequently osteomyelitis, especially the hematogenous type, hyperparathyroidism and tuberculosis may be considered in the differential diagnosis. Again clinical and laboratory data may be needed to differentiate with complete assurance.

Summary and Conclusions

1. Two hundred and forty-nine cases of leukemia have been reviewed and the bone changes in seventy-two adequately radiographed cases are presented.

2. The distribution, incidence and type of changes are described.

3. The clinical and roentgen relationship between bone changes in chronic myelogenous leukemia and myelosclerosis is discussed in some detail.

4. Roentgen diagnosis of the bone changes in leukemia requires that it be differentiated from neuroblastoma, cancer metastases, tuberculosis, hematogenous osteomyelitis, diffuse type of Ewing's tumor, and Hodgkin's disease.

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A Physician's Obligation to the Courts

The Technique of Being a Good Medical Expert Witness

By Edward D. Spalding, M.D.

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TWO YEARS ago in February, there appeared in the *Detroit Medical News* an editorial entitled "Expert Testimony, Called and So-Called." The events that led to this bit of writing were some especially flagrant examples of so-called expert testimony in a case to set aside a will in one of the Detroit courts. In this editorial a specific change in court procedure was outlined which might help obviate the kind of testimony that is a disgrace to both the medical profession and the bar.

One of the reasons that expert testimony, and especially medical expert testimony, has come to command so little respect in court is that, unfortunately, there are physicians to be had who, for a price, are willing to testify to almost anything on either side of a case. And there are attorneys who avail themselves of such testimony.

At the close of this talk some of the ideas in that editorial will be discussed. However, first there are some suggestions as to technique for the medical expert witness before going into court, and later while on the stand.

One basic statement should be made at the outset that it is *not* the duty or function of a medical expert to *win a case* but rather *to inform the Court,* and Jury if there is one, on technical matters in which he is especially trained.

Before going into court an expert witness should spend some time familiarizing himself with all the available facts bearing on his phase of the case. Nothing is quite so disconcerting, after having discussed the medical facts and expressed an opinion, as to have the opposing counsel then call attention to certain salient points that have not been given consideration. After surveying the available data a professional opinion should be carefully formulated in advance. To depend on a general knowledge of the subject is not enough. Moreover, all this should be gone over in detail with the attorney in advance, so that he will know how such an opinion can best be presented, and any pitfalls to be avoided can be pointed out.

Later, on taking the stand, there are a number of do's and don't's:

1. A medical witness should be sufficiently conversant with court procedure to know his rights, but also his limitations. The world in which the physician practices is quite different from the situation in court. At the bedside the doctor makes the decisions and gives the orders, but on the stand he is under the direction of others. Many doctors have difficulty in adjusting themselves to this—especially are they likely to resent cross-examination. They are in the habit of having their statements accepted without question. But if there were no differences of opinion the case would not be in court in the first place. And cross-examination is one of the best devices man has developed for ferreting out the truth; not one man's opinion as to what is the truth. If a professional opinion is well grounded, it should stand up under cross-examination, in fact under cross-examination it can often be greatly reinforced (something many lawyers have learned to their sorrow). Nothing is more effective in court than for a well-trained professional witness to be able to carry his point over opposition.

2. Although an expert witness is frequently testifying as to his opinion in a technical matter, nevertheless it is most important to stick to facts and not make overstatements. A good opposing attorney is very quick to appreciate when a witness has overstated his point and much excellent testimony has been rendered rather ineffective when the witness has had to retract an extreme statement. If I may be pardoned for one personal reference, the only advice my father, himself an attorney, ever gave to me about testifying was years ago when he said, "If you will stick to what you know you should have no trouble as a witness."

3. When testifying on a technical subject avoid as much as possible the use of technical language. Remember those whom you are addressing are laymen in the medical sense, however learned they may be in their own fields. The purpose of all technical testimony is to convey ideas, and simple descriptive language is by far the most effective for this purpose. The failure to do this is one of the worst faults of doctors as a whole as witnesses. If at times a specific technical word need be used, immediately explain it parenthetically in simple language.

Presented at the Conference on Expert and Technical Testimony in Medical and Health Problems at the Institute of Industrial Health at the School of Public Health, University of Michigan, Ann Arbor, Michigan, October 21, 1953. All the papers given at this Conference will be published by the University in one bound volume, price $2.50. This paper is published by permission of the Institute.

4. Be sure you understand the question before starting to answer it. Don't be hurried; take time to properly phrase your answer, considering all the possible implications before you speak. The opposing attorney will be most obliging in leading you out on a limb which he will promptly and dextrously saw off when you have committed yourself and become completely involved.

5. Never hesitate to say "I don't know," if such is the case on any particular point. It is true that a qualified expert is supposed to be informed in his own subject, but no one is omniscient, and only the tyro thinks he must make it appear so. If a witness does not know the answer in a specific matter, it is very soon apparent, and to attempt to make it seem otherwise is to run the great risk of being made ridiculous. The trained expert saves himself difficulty and embarrassment from any further questioning by promptly admitting his lack of knowledge on a particular point. If the opposing attorney continues to press his questioning the court will say "The witness has already testified that he does not know."

6. Don't talk too much; be as concise in answering as possible. Remember every unnecessary word, or the volunteering of additional information, gives the opposition another point of attack. Furthermore, whenever possible, hold in your memory the exact data (dates, measurements, symptoms, and signs) contained in a case record and do not take it with you on the stand (unless ordered to do so). This will require meticulous preparation beforehand, for such data cannot be guessed at. However, if it can be done and done right in all details, it makes it obvious that one is thoroughly conversant with the facts in a case. It also deprives the other side of many openings for cross-examination. Remember, any document which is used on the stand to refresh the memory must, on request, be handed over to opposing counsel for perusal *in its entirety*. Why furnish the opposition with a springboard from which to start his cross-questioning.

7. Never lose one's temper, in spite of what may seem to be quite uncalled-for rough treatment by a cross-examiner. It is an old trick in the boxing ring to make your opponent mad. A witness who lets his emotions get out of hand is at a great disadvantage. He does not think well and says many things better left unsaid. A doctor who preserves the dignity of his profession and the court under exasperating attack gains the respect of all present.

8. Once a technical witness has conservatively stated an honest and well-founded opinion he should not permit a cross-examiner to "whittle it down" by postulating various exceptional conditions. This is still another basic reason for not overstating one's position in the first place. The witness having made a careful affirmative statement should not permit the word "but"—and then a qualifying clause to be put in his mouth. The "Yes, but—" witness is of little help to the court, or credit to himself.

9. At times a cross-examining lawyer will attempt to force an expert witness to answer some questions by only "yes" or "no." A material witness who testifies as to facts can be made to do this. But an expert witness is there to testify as to his technical *opinion* (by virtue of his special training). If a question is so phrased, and of course it is often deliberately so done, as to give a distorted impression if answered by "yes" or "no" without amplification, the expert can insist that a proper qualification be added in his answer. He is there to inform the court as to his opinion in the light of his special knowledge.

10. Finally, no expert witness *ever* need compromise the truth or himself.

In closing, I wish to go back to the ideas for modifying court procedure concerning expert witnesses editorially expressed.

In any litigation, it is the right of either side to bring in such supporting testimony as they can properly secure. At present, however, the court is often confronted with a direct conflict in medical testimony as introduced by the two sides. The suggested plan is a means by which the court may avail itself of information on technical matters from those especially qualified in any particular field.

Under this plan a broad panel of qualified experts, subdivided into special fields, is set up by an appropriate official organization in the various professions (in the case of medicine the County or State Medical Society), such a panel to be carefully revised each year on the basis of past performance.

Experts to fill this rôle should have three basic qualifications:

1. Unquestioned integrity.

2. Recognition as being outstanding in their chosen field.

3. Ability in the expression of technical knowledge, and the specific implications to be drawn from such.

In any particular case should the court find itself confronted by seriously conflicting professional testimony, it could select one or more experts from an appropriate panel. Such experts would then be *called by the court* as neutral wit-

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Use of Scientific Records and Exhibits in the Court Room

By Eli Sherman Jones, M.D., F.A.C.S., F.I.C.S.

Hammond, Indiana

TESTIFYING in court may seem to be quite a chore to a doctor. However, if one treats accident cases, it becomes his duty to appear in court to give his findings if called upon to do so. All accidents and every occupational disease occurrence are potential law suits. The eventual adjudication of the case may depend upon the doctor's testimony. The doctor should first take care of his patient for any injury that requires immediate attention. Next, the most careful history should be taken and recorded as soon as possible. Should the patient be unconscious, the facts should be obtained from witnesses to the accident.

It is not the doctor's rôle to be partial to one side or the other. It is his duty to obtain the true facts and those given on the first examination are usually the most accurate. As days and weeks and sometimes even years pass, it would be very difficult to remember just exactly what happened at the time of the accident. With the passage of time, one's ideas may change a great deal.

No doctor is criticized for doing his best to obtain a correct history from his patient. The doctor, of course, must accept the word of his patient, and if it later turns out to be false, the doctor is not at fault. A correct history is important for the care and treatment of the patient. If this history, when it is reduced to writing, and has some bearing upon the diagnosis and treatment of a patient, later becomes evidence in a court case, it is as much a scientific record as x-rays. For this reason, if for no other, a correctly recorded, detailed history is important.

The history which states that the patient was in an automobile accident and broke his finger or bruised his leg is really of no value. It may be of great value in the treatment of the patient to know whether there was a head-on collision or if the car was struck from the rear or from the side and on which side. It is also important to know who was driving the car at the time of the accident, and if the car was struck on the side of the driver or on the opposite side. It is necessary to know if the passenger was riding in the front or back seat. The position of the person in the car may determine the type of injury. An arm rest may cause a fractured pelvis. The steering wheel could cause an intra-abdominal injury. It is most embarrassing, a year after an accident, to be asked which leg was hurt or which finger was broken when the record shows only a finger or leg. Accuracy of records is as important as accuracy of therapy.

It is the doctor's duty to make his examination thorough and use any test that will help evaluate his patient's physical and emotional state. This includes x-rays, body fluid tests, biopsies and even autopsies. Under certain circumstances, it may be just as important to run a blood alcohol test as it is a blood count in order to accurately determine the condition of the patient. Whether or not the records and data obtained from such an examination should be admitted in evidence in court is the problem of the court to decide. It is the doctor's duty to take x-rays and to perform any laboratory procedure needed to properly care for a patient, and he cannot be censured for so doing. If these diagnostic procedures are omitted, the question of neglect may arise. The findings thus obtained are necessary for the proper care of a patient, but due to rules of law may not be proper evidence in a case tried in court.

Sometimes there is a question who should present technical records or laboratory findings. The court may refuse to permit one to testify from reports received from a laboratory. It is a rule of law that a person can testify only as to his personal knowledge. Even though the doctor on the witness stand is under oath to tell the truth and though he may quote correctly from the written reports of a technician or laboratory, the doctor may be prohibited from testifying, the reason being that the other side does not have the opportunity to cross-examine the technician who prepared the report for the doctor. When the doctor testifies from a report of someone else, it becomes hearsay evidence and may be excluded. For example,

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if a doctor is permitted to testify from the record of a technician on a test for carbon monoxide, it may be very important for the other side to be able to examine the technician in order to show that the color comparison test is not accurate. It might possibly be that the only purpose of taking the test was to determine whether or not carbon monoxide was present in the blood and at the time it was not thought important to determine the exact percentage that was present. The doctor who is reading the report of the technician therefore cannot be subjected to the same type of cross-examination to which the technician might be subjected. Due to rules of law over which we, as doctors, have no control, our normal procedure, which is satisfactory from a physician-patient standpoint, becomes cumbersome when it is necessary to present all of the facts in a law suit. However, the court may permit the doctor to testify from laboratory reports if the doctor guarantees their authenticity.

Technical records such as x-rays, blood counts, blood chemistry, et cetera, are extremely valuable and important. However, they are only of value when they are accurate. Many examples of x-rays can be cited. With a fracture of the body of a vertebra, os calcis and many others, it may be impossible to tell at first whether the lesion is an old one or a new one. The position in which the picture is taken may or may not reveal a fracture. Oftentimes it is very difficult to diagnose dislocations such as an acromio-clavicular joint. Different opinions might be obtained from very competent men. Immediate x-rays are most valuable. Many things may happen between the time of the accident and the adjudication, and the original x-rays may be the determining factor as to the status of the patient at the time of the trial. It is the doctor's duty to know the facts, which may be difficult to obtain, if x-rays are not taken at once.

A specimen for laboratory analysis, unless taken by a technician at the time of examination, should be prepared and sealed in the presence of a witness and signed at the time of the preparation. If the test is not run under the immediate direction of the doctor and it is necessary to send the specimen by mail, a receipt should be required so that there is definite connection between the specimen taken and the delivery of the specific specimen.

Exhibits are most valuable and important in the court room. To what extent they should be used and how elaborate they should be is at the discretion of the court. Exhibits may alter testimony which is very sincere. For example, a patient was treated for two years for an alleged injury to his shoulder. He complained of a great deal of pain in abduction, extension and rotation; in fact with most movements of the shoulder. X-rays were all negative with questionable exception of the acromio-clavicular articulation. One roentgenologist thought there was a slight separation and two others thought not. However, giving the patient the benefit of a doubt, a permanent impairment percentage was estimated. Moving pictures had been taken of the patient at various occupations without his knowledge. Much to the surprise of the doctor, he was using one arm as well as the other without difficulty, completely abducting and extending his arm without the slightest evidence of pain or impairment. Any exhibit which shows true facts, regardless of whom it affects, should be admitted in court.

Technical records, which include written reports, x-rays, blood counts, blood chemistry, et cetera, are valuable. They are valuable in any court case that may result from an injury, or occupational illness, and may be of great value in protecting the patient's health and life, even years later. The doctor should exercise utmost care to see that records are not impounded by a court unless duplicates are obtainable. After they have served their purpose in court, they should be returned to the patient's permanent file. Upon request, the lawyer can usually be permitted to withdraw original x-rays, slides or preserved tissue, otherwise they are usually left with the court reporter for safe keeping. We, as doctors, should not hesitate in requesting the attorney to obtain the original exhibits or substitute copies if it is at all possible. Except in the case of x-ray pictures, slides or preserved tissue, copies or photostats can always be substituted for the originals. X-rays and the like are the property of the doctor or the hospital and they are directly responsible for their safekeeping. However, if they are used in the court, technical custody is placed in the court itself, and after final termination of a case, it ordinarily would be possible to have the custody returned to the doctor or the hospital.

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Postpartum Pituitary Necrosis

By Walter J. Zimmerman, M.D., Palmer E. Sutton, M.D., and Albert Boyajian, M.D.
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THE PURPOSE of this report is to call attention to a postpartum endocrinopathy which is clear-cut and easily diagnosed except that its relative infrequency often permits it to be overlooked. Women suffering from pituitary insufficiency on the basis of postpartum necrosis of the gland (Sheehan's syndrome) are frequently treated as puzzling and refractory problems of anemia, hypothyroidism, hypo-ovarianism, Addison's disease, or functional hypoglycemia because the widespread endocrine deficiency with its specific origin is not recognized.

In 1914, Simmond's observations on the syndrome of panhypopituitarism were first published.[4] He noted a variety of lesions which might destroy the pituitary gland giving rise to the syndrome to which his name subsequently became attached. In 1937 Sheehan[1,2] pointed out the importance of obstetric hemorrhage and shock in the pathogenesis of Simmond's disease, and his careful studies indicated that a large proportion of verified cases of hypopituitarism in women were of this origin. The pituitary normally undergoes rapid involution at the time of the puerperium, and with severe hypotension occurring at the time of delivery it is peculiarly susceptible to vascular thrombosis and consequent infarction. Sheehan further indicated a correlation between the degree of pituitary destruction and the severity of the clinical manifestations. The severest cases were found to be associated with a loss of 95 per cent or more of the gland, moderate symptoms might follow a loss of 75 per cent, and no symptoms at all result where only 50 per cent is destroyed. It is because of these basic contributions to our knowledge of pituitary insufficiency that the term "Sheehan's syndrome" has become attached to this most important group of Simmond's disease resulting from postpartum pituitary necrosis.

Clinical Picture

In the typical case, the clinical picture is characterized by a history of peripheral vascular collapse attending full-term delivery from which the patient dates the onset of the following symptoms: failure of lactation, failure of re-growth of the pubic hair (which had been shaved for delivery), loss of axillary hair, loss of libido, atrophy of the breasts, weakness and malaise, loss of appetite, and intolerance to cold. In some instances, however, when initial destruction of the anterior lobe is not complete, there may be a long latent period between the delivery and the onset of symptoms.

Findings on physical examination will vary with the degree and duration of pituitary insufficiency. Generally the patient presents a striking pallor and evidence of moderate weight loss, but almost never extreme cachexia. The facial expression is dull and apathetic. In addition to the absence of pubic and axillary hair already mentioned, there may be thinning of the eyebrows and of the scalp hair. The skin is cold and dry, and atrophy of the breasts is noted. The blood pressure may be normal or low. Body temperature is often low and the pulse slow. There are no characteristic findings on examination of the heart, lungs, and abdomen.

Laboratory studies will reveal deficiency in the pituitary trophic hormones and a secondary deficiency of the hormones of all the target glands. The available laboratory procedures are classified in Table I according to the organ chiefly responsible for the abnormal finding.

While the fully developed case of Sheehan's syndrome presents the easily recognized clinical picture just described, lesser degrees of insufficient anterior pituitary function may occur and offer greater difficulty in diagnosis. This has been emphasized by Schneeberg et al,[3] who reported a careful study of eight survivors of postpartum hemorrhage and shock. They found laboratory evidence suggesting pituitary hypofunction in two cases where clinical findings did not indicate the typical Sheehan's syndrome.

Report Of Case

Case 1.—Because of profuse vaginal bleeding occurring late in the third trimester of her second pregnancy, B. P., a twenty-three-year-old white woman, underwent delivery by cesarean section in June, 1952. The section was followed by hysterectomy because of uterine atony, and the patient's condition was such that transfusion of three pints of blood was required.

She first consulted the authors in October, 1952, with the following complaints which she dated from the time of her delivery: Extreme weakness and lassitude, intolerance to cold, weight loss of 17 pounds (from 128 lbs. to 111 lbs.), loss of sexual desire, and recurring severe frontal headaches. Questioning elicited history of failure to lactate and of subsequent breast atrophy,

TABLE I. LABORATORY STUDIES IN PITUITARY INSUFFICIENCY

Organ	Test	Findings in Pituitary Insufficiency	Patient, B.P.	Normal Values
Pituitary	24 hr. urinary gonadotrophins	reduced or absent	less than 6 mouse units	6 to 50 mouse units
	X-ray of sella turcica	normal	normal	normal
Thyroid	B.M.R.	low	—25%	—10% to +15%
	serum cholesterol	normal or elevated	300 mg. %	150 to 230 mg. %
	serum protein-bound iodine	reduced		4-8 mcg.%
	I^{131} uptake	reduced		10% to 40% uptake in 24 hrs.
Adrenal Cortex	17-ketosteroids	markedly reduced	1.2 mg./24 hrs.	8 to 15 mg. in 24 hrs.
	Kepler water test	delayed diuresis "A" value usually <25	"A" =24	"A" > 30
	serum sodium	normal or low	149 m.eq./1	136-145 m.eq. per 1.
	serum potassium	normal or high	4.3 m.eq./1	3.5 to 5.5 m.eq. per 1.
	serum chloride	normal or low	106 m.eq./1	100-106 m.eq. per 1.
	Thorn test with ACTH (intramuscular)	normal or reduced response	46% decrease in eosinophiles	decrease in eosinophiles of 50% or more.
Ovaries	Vaginal smear	loss of estrogen effect	loss of estrogen effect	normal estrogen effect.
	24 hr. urinary estrogens	low		15 to 50 mcg./24 hrs.
General	Fasting blood sugar	low	67 mg.%	80-120 mg.%
	Oral glucose tolerance	flat curve	flat curve	
	*Insulin tolerance test	hypoglycemia unresponsiveness		
	Hemoglobin & R.B.C.	normochromic anemia	Hb. =70% C.I. =1.0	Hb. =80 to 100%

*While the insulin tolerance test has been widely cited as a procedure in the study of hypopituitarism, it should not be performed in this condition because of the dangerous hypoglycemic reaction which may result.

failure of re-growth of pubic hair and loss of axillary hair. There was no history of any background for psychiatric disturbance. Physical examination substantiated the history and further revealed marked pallor, a cold, dry skin, and coarseness of the scalp hair with loss of hair especially in the frontal area. The blood pressure was 110/70, oral temperature 97.0 degrees, and pulse 80 per minute. Findings on examination of the heart, lungs and abdomen were not remarkable.

The results of laboratory studies are indicated in Table I. These gave clear-cut evidence of deficient function of the anterior pituitary, and of the endocrine organs dependent upon pituitary stimulation. Studies not listed in the table included a negative chest x-ray, and an electrocardiogram which was normal except for low voltage T-waves.

The general appearance of the patient is shown in Figure 1.



Fig. 1.

Diagnosis

The diagnosis of the typical case of Sheehan's syndrome is not difficult and for practical purposes can be established on clinical grounds alone. The chief difficulty lies in the fact that the condition occurs just infrequently enough so that it is forgotten. The direct relationship to obstetric shock, and the objective signs of failure of lactation, failure of re-growth of pubic hair, and loss of axillary hair are easily recognized clues.

The common syndromes of functional asthenia and psychoneurosis are easily differentiated by the maintenance of the secondary sex characteristics and normal findings on laboratory study.

Cases of anorexia nervosa may give rise to confusion because of similarities arising from amenorrhea, weight loss, reduced metabolic rate, and diminished adrenal cortical function as evidenced by low excretion of 17-ketosteroids. Anorexia nervosa more commonly occurs, however, in the unmarried woman, and positive evidence of psychopathology will be found. Marked emaciation is regularly present in anorexia nervosa, but rare in Sheehan's syndrome, and loss of axillary and pubic hair will not be noted in the former state.

Primary disorders of the target endocrine organs may cause confusion, especially if a direct relationship to obstetric delivery seems apparent. Conversely, in cases of Sheehan's syndrome, an incomplete diagnosis may be made, and the patient may be treated as primary hypothyroidism, Addison's disease, or hypo-ovarianism for long periods before the complete picture is recognized.

Other causes of true pituitary insufficiency must be differentiated. In cases of granulomas and fibrosis the history of obstetric shock will not likely be found. X-ray of the sella turcica will be helpful in detecting the pituitary tumors which may give rise to this syndrome.

Treatment

The treatment of pituitary insufficiency is still a matter of investigation; no definitely superior program can be outlined at present. Although administration of the lacking pituitary hormones would be physiologically ideal therapy, there is no potent polyvalent pituitary preparation available. At present corticotropin (ACTH) is the only potent trophic hormone available, and its use is theoretically preferable to replacement with adrenal cortical hormones. Cortisone must be employed, however, if the patient fails to respond to ACTH.

Adequate replacement of thyroid function can usually be obtained with 1 to 2 grs. of desiccated thyroid daily. This should be instituted only after correction of adrenal insufficiency has been obtained. Oral estrogen therapy should be employed for correction of ovarian insufficiency, and testosterone either by injection or in the form of buccal tablets is required for its protein anabolic effect.

Summary

A case of postpartum pituitary necrosis giving rise to panhypopituitarism (Sheehan's syndrome) is reported, and the distinctive features of this condition are discussed.

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USE OF SCIENTIFIC RECORDS AND EXHIBITS IN THE COURT ROOM

(Continued from Page 163)

Summary

1. All accidents and occupational diseases are potential law suits.

2. History immediately taken is very important and should be a part of the patient's permanent file with a statement from whom obtained.

3. Tentative diagnosis is of little value. Permanent diagnosis is a necessity and a part of the record.

4. Casual, unconfirmed impressions are of little value.

5. Technical records must be honest and not taken as trick records to distort the facts.

6. One thoroughly capable of presenting technical exhibits or records should be permitted to present authentic records or exhibits.

7. It is the duty of the physician or the hospital to safeguard records and they ought not be impounded by a court after their useful purpose has been served.

There should be due notice given, when a case is set for trial. It is then incumbent upon the doctor to review the facts in the case and prepare himself by careful review of the records and exhibits which he may possess, as well as any other material, which will assist in careful, concise and clear testimony, presented so all may easily understand his statements. Technical records and testimony unexplained may be of no value to a jury and possibly confusing to the jurist. Regardless of how technical a report may be from which the physician is testifying, the physician must clarify it to the court and the jury or its value may be entirely lost.

5231 Hohman Avenue

Clinical Evaluation of Segmental Peridural Block

By John J. Bonica, M.D.
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THE VALUE and clinical usefulness of properly administered and completely effective regional analgesia and the many advantages it offers to patient, surgeon, and anesthesiologist are recognized and well appreciated by all those clinicians who have had sufficient experience with it. The outstanding benefits are the slight degree of disturbance of physiologic function of the patient and the optimal operating condition which it affords the surgeon.

Among the many regional anesthetic procedures, none is more useful than segmental peridural (epidural or extradural) block which involves the injection of local anesthetic solutions into the peridural space of the lumbar, thoracic, or cervical region. This procedure can be used to anesthetize any region of the body below the clavicle with maximum safety to the patient and least disturbance of physiologic processes. By varying certain factors, any selected number of segments can be anesthetized, thus affording the advantages of local infiltration, field block, intercostal, paravertebral, or subarachnoid block without their disadvantages, dangers, and complications. Moreover, after gaining experience with the technique it can be done almost as easily and as quickly as subarachnoid block. Yet, in spite of these obvious advantages, segmental peridural block has not been used in this country as frequently as it should have been. This probably has been due to certain misconceptions.

It is the purpose of this paper to present a detailed discussion of this method and to present sufficient clinical material to show that it is a useful, clinically practical form of analgesia.

History

Peridural anesthesia was first accomplished in 1885 by Corning, who in the process of animal experimentation on subarachnoid injection, discovered by accident the possibility of introducing cocaine itno the lumbar peridural space to produce anesthesia. His great interest in subarachnoid block left little time for further experimentation and nothing more was done about segmental peridural block until 1920 when Fidel Pages,[17] a young Spanish military surgeon, proposed the use of this procedure, which he called metameric anesthesia, for surgical procedures. The next year he reported its use in forty-three abdominal cases, but unfortunately his premature death terminated his work and consequently his report went unnoticed for a decade.

Six years after Pages' publication, Dogliotti,[6] obviously unaware of Pages' work, began extensive experimental and clinical studies on peridural anesthesia, the results of which he reported to the Italian Surgical Congress in 1931. His efforts, as well as those of Guiterrez[10] of Argentina, were largely responsible for the widespread use of this procedure in many countries of Europe and Latin America. In this country the procedure was given extended clinical trial by Odom,[16] Harger,[11] and several other American clinicians, but for some reason, it has not gained the widespread popularity it deserves. It is hoped the apathy which exists in the United States toward peridural anesthesia will be abandoned and more clinicians will take advantage of this excellent form of anesthesia.

Anatomic, Physical and Physiologic Basis

Before discussing the technique, it might be profitable to briefly consider the anatomical, physical and physiologic basis of segmental peridural block.

Peridural Space.—The peridural space is the interval between the dura and the periosteum lining the vertebral column. It surrounds the arachnoid-dural sac in all of its extension from the foramen magnum to the conus terminales, which in the fetus extends to the sacral hiatus, but in the adult, due to unequal growth of the meninges and the vertebral canal, extends to the level of the second sacral vertebra. Inferiorly, the peridural space is continuous with the sacral canal, which is sometimes referred to as part of the peridural space; and laterally it communicates with the paravertebral tissues and spaces by means of the forty-eight intervertebral formina.

The width of the peridural space varies greatly.

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The anterior portion is very narrow and almost theoretical because of the close contact between the dura and the posterior longitudinal ligament, whereas the posterolateral portion, existing between the dura, on one hand, and the ligamenta flava and the lamina on the other, is wider, varying 3 to 6 mm, in different parts of the vertebral column. It is widest in the middle thoracic region, between the fourth and ninth thoracic vertebra, where the spinal cord and its dural sac are reduced in size. Although in the lumbar region it is slightly smaller, its trianguler shape with the apex of the triangle corresponding to the posterior midline of the vertebral canal where the right and left ligamenta flava come close together produces a relatively wide space. As mentioned above, the peridural space superiorly does not extend beyond the foramen magnum, where the dural attachment to the entire circumference of the foramen forms an inpenetrable barrier to any fluid proceeding upward.

The peridural space is filled with adipose connective tissue and loose areolar tissue, through which run the internal vertebral venous plexus, lymphatics, and the finger-like dural projections which surround the spinal nerve roots. Although this tissue is loosely adherent to the vertebral canal and dura, it is easily stripped from the dura by fluids which are dispersing from the point of injection.

Negative Pressure of the Peridural Space.—The existence of a negative pressure in the peridural space, first described by Heldt and Maloney in 1928[12] is now generally accepted. Whether this negative pressure is constantly present or is created by entrance of the needle into the space is a controversy. Dogliotti[7] believes that this negative pressure is composed of two elements. The first results from flexion of the vertebral column which causes an increase of the distance between the spinous processes of the vertebrae and consequent increase in the length and volume of the canal so that there is produced a transient negative pressure. This negative pressure is reduced within a short period of time by an influx of venous blood. The second element is created when the dura is pushed forward by an advancing needle to create a cone of depression; the further forward the dura is pushed, the greater the cone of depression and the greater the negative pressure. MacIntosh and Mushin[15] and Bryce Smith[1] have presented findings which seem to support the theory that a true negative pressure exists in the peridural space which is independent of any artificial factor. These authors suggest that this negative pressure is present during inspiration and is transmitted from the thorax, indirectly by the negative suction action on the veins, and directly through the intervertebral foramina which connect the peridural with the intrathoracic space. Regardless of the cause, this negative pressure can be demonstrated by using either a water manometer attached to the hub of the needle or by placing a drop of solution over the hub of the advancing needle.

Rapid injection of solution into the peridural space causes a temporary increase of the cerebrospinal fluid pressure, which returns to normal after the injection.

Dispersion of Fuids Injected into the Peridural Space.—Following injections of fluids into the peridural space there is an homogenous spread of the solution in all directions away from the point of the needle and within a few seconds it passes through the intervertebral foramina and into the paravertebral spaces. In the thoracic region colored solution has been found as far distal as the angle of the ribs.

The extent of dispersion of fluids injected is in direct proportion to the (1) quantity of solution injected, (2) the force and rapidity of injection, and (3) the position of the patient. Although gravity plays a less important rôle than it does in spinal anesthesia, it does effect the dispersion of the liquid and should be considered. Thus the Trendelenburg position favors dispersion cephalad, where the sitting position favors a caudad dispersion. Furthermore, when a total volume is given in fractional doses, the dispersion is not as widespread as if it had been given in a single dose.

Solutions injected extradurally do not penetrate the dura, a fact first demonstrated by Sicard,[18] and Cathelin,[2] and later confirmed by Dogliotti and Bertocchi,[8] and many others. It is obvious, therefore, that local anesthetic solutions exert their effects beyond the point where the dura-arachnoid covering fuses with the perineurium of the formed spinal nerves. Since this usually occurs at the outer portion of the intervertebral foramen, the anesthetic block is effected in this portion of the intervertebral foramina and in the paravertebral

spaces and can, therefore, be rightly considered as paravertebral block.

Physiologic Effects.—The sequence of events following peridural block is the same as with subarachnoid block except that the onset is much slower. This delay in action is no doubt due to the fact that the solution must reach and effect nerve fibers distal to the arachnoid-dural cuff, and is also due to the fact that these fibers are protected by thick connective tissue sheaths which must be penetrated by the anesthetic solution.

Three to five minutes after the injection, there is increased temperature of the skin, indicating block of the vasoconstrictor fibers. At this time or soon thereafter, there is loss of temperature sense, and hypalgesia to pinprick, which develops into analgesia in ten to thirty minutes, depending on the drug employed. With 2 per cent xylocaine, complete analgesia occurs within ten to fifteen minutes; with 2 per cent procaine, it occurs in fifteen to twenty minutes; while with 0.1 to 0.2 per cent pontocaine or nupercaine analgesia it may not be complete until thirty minutes after the block is administered. This is followed by muscle weakness which may or may not progress to complete paralysis, depending on the concentration of the drug. With 2 per cent xylocaine and 0.25 per cent pontocaine, muscular paralysis is complete.

These changes occur first, and are most profound near the point of injection; the farther away from this point, the longer the time for onset, and the weaker the effect. This is probably the result of the progressive reduction in concentration of the drug as it disperses away from the site of injection and becomes diluted with tissue fluids.

The physiologic effects and alterations which follow peridural block are similar to those consequent to subarachnoid block. If complete analgesia is effected, there is concomitant complete sympathetic paralysis of the same segments with the consequent vasodilatation and hypotension, increase in intestinal tonus, and absence of sweating. The claim made by some enthusiasts of peridural block, that the degree of hypotension is not as great as it is with subarachnoid block is only true if less sympathetic segments are involved. When a certain number of sympathetic segments are blocked, whether this is produced with subarachnoid, peridural, or paravertebral block, the effects on the blood pressure are the same. Thus it has been repeatedly observed that the effects on blood pressure of a peridural segmental block, extending from the first thoracic to the third lumbar segments, are the same as that of a high spinal anesthetic extending to the first thoracic segment. The fact that subarachnoid block usually effects more profound intercostal muscle paralysis, and anoxic hypoxia consequent thereto, may be a significant factor in aggravating the effects of hypotension and may account for the difference sometimes noted in the effects of subarachnoid and peridural block.

Technique of Administration

The *preliminary preparation of the patient* is the same as with any other form of regional block. The patient is usually given a short-acting barbiturate, such as pentobarbital in doses ranging from 0.1 to 0.2 gm., two hours before the block, and morphine 10 mgm. or Demerol 100 mgm. with scopolamine 0.3 mgm. one hour before the block.

The *equipment necessary* for segmental peridural anesthesia is the same as for any regional block except that there should be a 20 or 19-gauge needle with a very short bevel and a well-fitting stylet. The wide diameter and short bevel of such a needle permits the administrator to more easily appreciate the varying degrees of resistance offered by the different tissues traversed and to better discern entrance into the peridural space. In addition, a Sise introducer or sharp, 18-gauge needle is employed to make a path in the skin, subcutaneous tissue, and supraspinous ligament for the short beveled needle. An extra medicine glass containing normal saline is also used.

Any of the *commonly employed anesthetic solutions* may be used in varying concentrations, depending on the effects desired. As previously mentioned, 2 per cent procaine, metycaine, intracaine or xylocaine, and 0.25 per cent pontocaine or nupercaine all effect a complete block. If motor block is not desired, one-half to one-third of the above concentration may be used. For sympathetic paralysis only, 0.2 to 0.5 per cent procaine, metycaine, intracaine or xylocaine or 0.02 per cent pontocaine or nupercaine may used. In most instances, and unless contraindicated, epinephrine in concentration of 1:200,000 is added to the anesthetic solution.

The total volume of anesthetic solution depends on the extent of the block desired and the

diffusibility of the local anesthetic drug. It may be generally stated that if procaine is used 1.5 cc. of solution are used for each segment; if xylocaine is employed 1.0 cc. per segment is sufficient; whereas if pontocaine is employed it is necessary to inject 2 cc. per each segment. In other words, if block of six segments is desired it is necessary to use 6 cc. of xylocaine, 9 cc. of procaine, or 12 cc. of pontocaine.

The lateral position, with the patient in acute flexion, is the best position to perform peridural injection. Some clinicians, however, prefer the sitting position because of increased negative pressure resulting in the upper thoracic segments.

The *site of puncture* depends upon the segments to be affected. Since the injected solution disperses in both directions from the site of puncture, and since the extent of distribution depends on the volume and the force of injection, and the position maintained during and after the injection, it is best to select the interspace which is the midway point between the upper and lower limits of the block, if the patient is in the recumbent position. For a block of the lower three cervical and upper three or four thoracic segments, the seventh cervical or first thoracic intervertebral space is chosen; for block of the upper six thoracic segments, the third or fourth thoracic interspace may be chosen; for block of the upper abdomen, the puncture may be made in the seventh, eighth or ninth thoracic interspaces; if the lower thoracic and the lumbar segments are to be affected, the twelfth thoracic or first or second lumbar interspace are best sites, whereas if the lumbosacral nerves are to be blocked, the fourth or fifth lumbar interspace is usually chosen.

Technique of Puncture.—The skin is sterilized with an antiseptic solution and a skin wheal made over the point of the selected interspace. The subcutaneous tissue and the supraspinous and interspinous ligaments are also infiltrated with the local anesthetic solution. A sharp, long beveled needle is introduced through the skin so as to produce an opening for the blunt peridural needle. The skin is immobilized with the index and middle fingers of the left hand and the peridural needle is inserted exactly through the middle of the interspace. The direction of the needle, and the angle its shaft makes with the longitudinal axis of the body, depends on the interspace chosen. In the lumbar region, the needle should be inserted perpendicular to the skin, whereas in the thoracic region, its point is directed upward so that the shaft of the needle is in line with the vertebral space.

The needle is advanced, care being taken to remain in the midline. As soon as it reaches the supraspinous ligament, definite resistance is encountered due to the nature of the bevel and the density of the ligament. The needle is then advanced through the loose interspinous ligament which offers much less resistance than the supraspinous ligament. The advance is continued until its point is felt to meet a third and greater point of resistance which is the compact ligamentum flavum. If the resistance is absolute, the point is against bone, requiring that the needle be withdrawn and reinserted.

When the point of the needle has engaged the ligamentum flavum, the stylet is removed, and an attempt is made to inject saline with a 5 cc. Luer lock control syringe. If the bevel of the needle is within the compact ligamentum flavum this attempt will meet with considerable resistance, whereas if the bevel is still in the loose interspinous ligament, the resistance will be of only moderate degree. With a little practice the various degrees of resistance, as the needle passes through the various structures, become better appreciated and is more easily discernible.

While the thumb of the right hand exerts steady pressure on the plunger of the syringe, the shaft of the needle is grasped between the thumb and forefinger of the left hand and very slowly advanced (Fig. 1). The left hand should rest on the back of the patient so as to steady the needle and better regulate the pressure that is exerted against it. In this manner the needle is very slowly and gently pushed through the ligamentum flavum until it enters the peridural space. As soon as the bevel of the needle enters the peridural space, there is a sudden lack of resistance, and the liquid can be injected very easily.

In the middle thoracic region, where the obliquity of the spinous process is extreme and there are frequently bony spurs on the surface of the adjacent spinous processes, making introduction of the needle through the interspace difficult, I use the paramedian approach. This is carried out by making a wheal 1 cm. lateral to the midline and infiltrating the subcutaneous tissues including paraspinal muscles and periosteum of the lamina with a 20-gauge needle. This injection serves not

only to produce analgesia but also to make a path for the short beveled peridural needle. The latter is inserted through the hole in the skin already made, and is directed toward the medial extremity

U-shaped manometer, the hanging drop sign or the balloon technique of MacIntosh. If the manometer is employed, it is attached to the hub of the needle after the stylet is removed, and

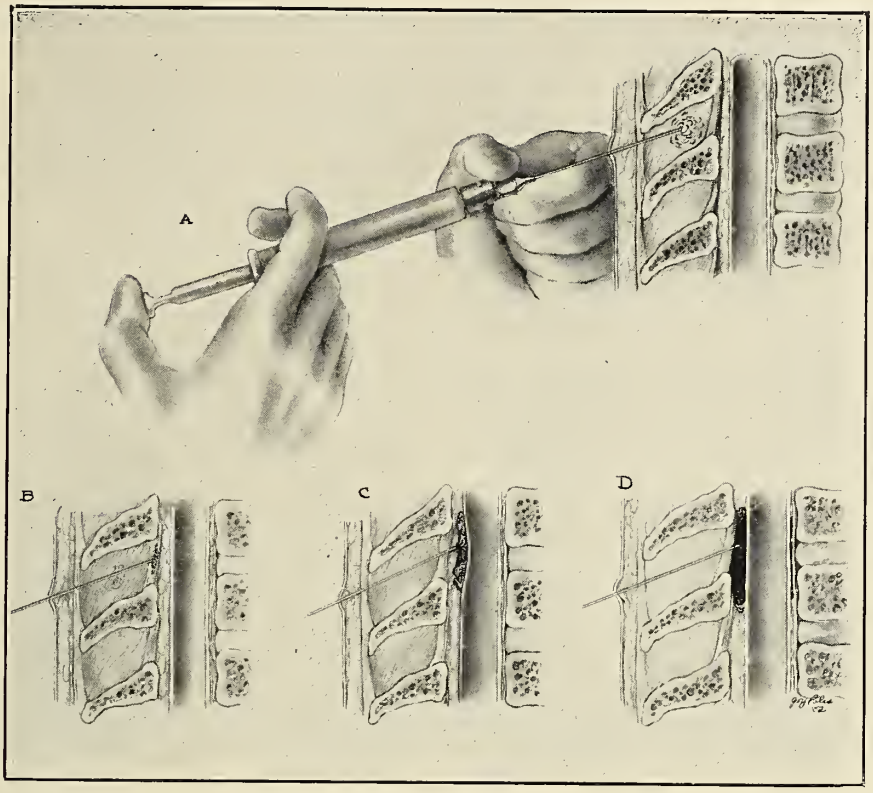


Fig. 1. Segittal section showing technique of peridural block. (*A*) Advance of the needle with the left hand while constant unremitting pressure is being exerted on the plunger of the syringe. Some resistance is offered by the interspinous ligament to injection of the saline. (*B*) Needle point in the ligamentum flavum, which offers great resistance. (*C*) Entrance of point of needle into peridural space is discerned by sudden lack of resistance to the injection of the saline. Saline pushes dura away from point of needle. (*D*) Diffusion of the solution throughout the peridural space . (Bonica, J. J., "The Management of Pain," Philadelphia, Lea & Febiger, 1953).

of the lamina. As soon as this structure is contacted, the needle is maneuvered so that its bevel faces the superior surface of the lamina and is felt engaging the tough ligamentum flavum. The stylet is then removed, and the syringe filled with saline, is carefully adapted to the hub of the needle. The needle is then advanced slowly, in the same manner already described, until sudden lack of resistance indicates that the peridural space has been entered. As the saline solution is discharged, the force of the injection pushes the dura anteriorly away from the needle point and from the posterior wall of the canal.

Other methods employed to ascertain entrance into the peridural space, include the use of a

when the peridural space is entered a negative pressure will be recorded by the manometer. The hanging drop sign is utilized by placing a few drops of saline on the hub of the needle after the stylet is removed so that a drop is bulging out of the hub. As the needle advances and enters the peridural space, the saline will be sucked in and disappears into the needle. It is not unusual to hear a whistling sound at this time which corresponds to respiratory movements. Odom[16] improved on this by attaching a glass capillary tube, filled with colored saline solution and containing air bubbles, to the needle. Entrance of the needle point into the peridural space caused the fluid and air bubbles to move towards the patient. Mac-

Intosh[15] employs a small rubber balloon which is distended with air and which collapses when the needle enters the peridural space.

If, after all of the maneuvers, one feels certain thaat the needle is in the peridural space, 3 cc. of anesthetic solution are injected slowly, and a period of five minutes is allowed to be certain again that the needle is not in the subarachnoid space. As mentioned previously, with peridural block complete analgesia and muscular paralysis does not appear until twelve to twenty minutes or longer after the injection, whereas with subarachnoid block these appear within five to eight minutes. In case the anesthetic is inadvertently injected into the subarachnoid space, the amount of drug in the initial injection is such that the usual subarachnoid block results without any unusual complications. If, however, the above precautions are not taken, and the full peridural dose of the anesthetic solution is inadvertently injected into the subarachnoid space, a massive subarachnoid block will result which may jeopardize the life of the patient. After this waiting period the calculated dose of the anesthetic solution is injected at a rate of 1 cc. per second with intervals of three to five minutes after each 10 cc. of solution is injected. In this manner, systemic toxic reactions due to rapid absorption are minimized, sudden increase of the cerebrospinal fluid pressure and consequent headache is avoided, the anesthetic solution is prevented from spreading too far, and the nerves in the desired zone are better saturated. In addition, this avoids the pain in the arms, shoulders, back, or legs (depending on the site of injection) that sometimes follows rapid injections which probably is due to displacement or stretching of nerve roots. This discomfort disappears within a few minutes after the injection is stopped.

Continuous Peridural Block

Following the introduction of the continuous subarachnoid block technique by Lemmon,[14] Hingson and Southworth[13] in 1941 began to consider continuous peridural block for prolonged analgesia, but temporarily discarded it in favor of continuous caudal. However, they reintroduced the method in 1944 after they had devised a useful technique with the same equipment used by Lemmon for continuous subarachnoid anesthesia. The malleable needle was introduced into the peridural space instead of the subarachnoid space, and then connected to the tubing and syringe. In January of 1947 Curbelo[5] began to employ continuous peridural segmental anesthesia by introducing a No. 3½ ureteral catheter into the lumbar peridural space through the special Huber-pointed Tuohy needle used for continuous spinal anesthesia, and in September of that year reported its use in fifty-nine protracted surgical procedures. A year later, Flowers, Hellman, and Hingson[9] and Cleland[3] reported the use of the same technique for obstetrical analgesia.

The continuous technique may be accomplished by inserting the needle in any segment. Although most clinicians prefer the lumbar segments, and particularly the second lumbar interspace where the peridural space is sufficiently wide, and danger of damaging the cord by losing control of the needle during its advance is minimal, we have successfully executed continuous peridural block in every thoracic and lumbar interspace.

The equipment for continuous peridural block includes a special 18-gauge short-beveled needle which allows passage of polyethylene tubing through it. This special needle is introduced into the peridural space in the usual manner. As soon as the needle engages the ligamentum flavum, the stylet is removed, the syringe with saline attached, and the needle slowly advanced until there is sudden lack of resistance. Injection of solution through this larger bore needle should offer no resistance at all and should feel as if the solution was being injected into the subarachnoid space. When it is ascertained by the various tests that the needle is in the peridural, and not in the subarachnoid space, the ureteral catheter is inserted through the needle and made to pass cephalad or caudad by directing the bevel of the needle accordingly. It is advisable to pass the point of the catheter to the segment which will be the midpoint of the zone of the block.

As soon as the catheter is properly placed, the needle may be withdrawn over it, aspiration of cerebrospinal fluid or blood is again attempted, and if none is obtained, an initial test dose of 2 to 3 cc. of solution is injected. If, after a waiting period of five minutes there is no analgesia or motor paralysis, the full therapeutic dose may be injected in the same manner as described under the single dose technique. The time and amount of subsequent doses depend upon the response of the individual patient to the first injection. It is im-

portant to remember that maximum intensity of the block does not appear until fifteen to thirty minutes after the injection, depending, of course, on the nature of the anesthetic agent.

Management of the Patient

The position of the patient following injection depends upon the region to be anesthetized. Since we employ the interspace which is approximately in the center of the zone of anesthesia, it is not necessary to employ the Trendelenburg or sitting position in order to obtain spread of the anesthesia cephalad or caudad, respectively. If it is desirable to concentrate the anesthetic on one side, as is the case for herniorrhaphy, the patient is left on the side of the operation in order to take advantage of the gravitational factor. This is particularly important if the patient is to be placed with the affected side up, as for nephrectomy, in which case the injection should be made with the patient's affected side down and left in this position for at least five minutes after the injection before he is positioned for the operation.

The management of the patient is otherwise the same as with subarachnoid block. Immediately after the injection is finished, an intravenous infusion is started in order to have a method for rapid administration of analeptics if these become necessary. In case the block will involve many sympathetic segments and a moderate drop in blood pressure is expected, a vasopressor may be administered intramuscularly at this time if circumstances warrant it.

Surgical preparation of the operative site can be begun five minutes after the completion of the injection. By this time hypalgesia is present and the level of analgesia can be predicted by the scratch test. Since five to eight minutes are usually consumed for the preparation of the skin, testing with a sterile needle before the region is draped, should indicate a definite region of analgesia. In the event the analgesia is not complete, it is our practice to give the patient nitrous oxide, oxygen, and Pentothal in sufficient amounts to permit the skin incision. If it is desirable to have the patient awake, these can be discontinued when sufficient time has passed to have a complete block. Since many of the patients request to be asleep during the surgical procedure, 0.1 per cent Pentothal drip alone or in combination with a mixture of 50 per cent nitrous oxide and 50 per cent oxygen are usually administered as complimentary agents* only. With this technique less than one-half gram of Pentothal per hour is sufficient to keep the patient asleep if an adequate block has been effected. In this way, the patient is afforded the advantages of regional and general anesthesia without some of their disadvantages. Hypnosis is particularly indicated in children and apprehensive adults.

Complications

As previously indicated, peridural anesthesia is accompanied with varying degrees of hypotension which is dependent upon the number of sympathetic segments involved. In case the block involves only a few of the sympathetic segments as obtains in peridural anesthesia for lower abdominal, inguinal, lumbo-renal, and lower extremity operations, the blood pressure variation in isotensive patients is negligible. However, if the block involves most of the thoracic segments, the blood pressure drop may be as much as 40 to 50 millimeters of mercury. Formerly, we would not tolerate this and would use vasopressor either prophylactically or for the active treatment of the hypotension. In the past two years, unless the patient's physical condition contraindicated it, we have intentionally disregarded such hypotension in order to minimize blood loss. This has been found particularly useful in radical mastectomies, decortication of the lungs, nephrectomies, and other surgical procedures which are attended with constant oozing and consequent loss of large amounts of blood. It should be emphasized that in patients with myocardial disease, hypotension should be avoided.

A more serious complication of peridural block is the inadvertent injection of the anesthetic solution into the subarachnoid space, resulting in a massive, total spinal block. Since two to three times the dose used for subarachnoid block is usually employed for peridural block, this complication must be avoided by proper technique and using a test dose of 3 cc. solution. When this complication occurs, it must be, of course, treated

*For reasons of clarity, additional anesthesia has been designated as complementary or supplementary, depending upon the effectiveness of the block. Whenever the block has been perfect and for some reason additional anesthesia had to be given, this was classed as complementary anesthesia. Supplementary anesthesia has been defined as that given as a substitute in cases of partial or complete failure of the block.

immediately with artificial respiration using an endotracheal tube and breathing bag with 100 per cent oxygen, intravenous fluids and vasopressor.

Occasionally, there is transient pain and headache during rapid injection, which improve immediately when the injection is completed. Rapid absorption of the local anesthetic solution with consequent signs of toxicity can occur if epinephrine has not been used or there is a tear in the venous plexus.

Advantages and Disadvantages of Peridural Block

The *disadvantages* of peridural block are some of those inherent to regional anesthesia. They include:

1. The discomfort inherent to injections. This can be minimized by gentleness and dexterity on the part of the anesthesiologist and adequate anesthetization of the skin and subcutaneous tissues. In order to obviate this disadvantage we frequently administer a small dose (100-150 mgm.) of Pentothal just prior to execution of the block. This is particularly indicated in apprehensive patients.

2. It is technically more difficult than general anesthesia and certain other regional techniques and is attended with failures. This is a relative disadvantage which can be obviated with experience; with the proper knowledge of the anatomic, physical, and physiologic basis, and of the technique. It is surprising to note how quickly one can become proficient with this technique.

3. Another relative disadvantage is that the onset of anesthesia is comparatively slow. As one engaged in the private practice of anesthesiology, I well appreciate the time factor, but this disadvantage can be eliminated by using 2 per cent xylocaine with its quick onset of action and Pentothal N_2O-O_2 during the first five minutes of the operation, as previously mentioned.

4. It is attended with sympathetic paralysis and consequent hypotension. Although this disadvantage can be obviated by using vasopressors, peridural block should be used with caution, if at all, in patients with peripheral circulatory failure.

5. There is the potential danger of inadvertent subarachnoid injection with consequent massive spinal anesthesia and possible damage to the spinal cord and/or the nerve roots.

6. The fact that the procedure requires a spinal puncture is a disadvantage to patients who particularly dislike such a procedure.

7. Occasionally the peridural block is not accompanied by complete muscular relaxation. This can be avoided by using the highest therapeutic concentration of the various local anesthetics and injecting the solution in repeated doses.

8. Like any other regional procedure, the duration is limited, but since one can employ the continuous technique, this is not a serious disadvantage. Single injections last about two hours with xylocaine or pontocaine.

9. The fact that the patient remains awake during the procedure may be considered a disadvantage. This can be obviated by using heavy premedication and/or dilute solutions of thiopental.

In most instances these disadvantages are outweighed by the many advantages this form of anesthesia affords the patient, surgeon, and anesthesiologist.

1. Comparing it with general anesthesia, it causes much less disturbance of physiologic processes. This is a particularly important consideration in poor risk patients who have heart, renal and pulmonary diseases, diabetes, et cetera. Moreover, in the post-anesthetic period, nausea, vomiting, and disturbance of fluid balance are minimal or absent and are certainly much less than following general anesthesia.

2. Properly administered segmental peridural block has certain advantages over subarachnoid block. Since the dura is not pierced, no headaches occur and there is less danger of involving the medullary centers or of producing neurologic sequalae. Moreover, because in most instances it is not necessary to involve the sacral segments, post-anesthetic difficulty with bladder and rectal function do not occur, and there is not the increased tendency for thrombus formation consequent to the inactivity of the lower extremities associated with spinal anesthesia.

3. Since peridural anesthesia requires only one puncture, it has significant advantage over intercostal or paravertebral block. It is much preferred to local infiltration and field block because: (1) it produces a more adequate anesthesia and muscular relaxation, (2) does not distort tissues and does not interfere with post-operative repair, (3) less anesthetic agent can be used, and (4) affords longer postoperative relief of pain. The latter point has been stressed by many clinicians, who have noted that following peridural block pain may be absent for many hours after the anesthesia disappears. Moreover, the continuous technique can be used postoperatively to relieve pain.

Personal Clinical Material

During the past four years peridural anesthesia was administered to 1,179 patients by my associates and myself in four general hospitals in

TABLE I. AGE AND PHYSICAL STATUS

Age in Years	Physical Status							Total	
	I	II	III	IV	V	VI	VII	No.	Percent
0- 9	8	2			11	1		22	1.7
10-19	43	6			36	3		88	7.4
20-29	96	12	1		19	2		130	11.1
30-39	139	7	2		27	8		183	15.5
40-49	158	42	6		45	17		268	22.7
50-59	107	37	11	3	30	6	1	195	16.5
60-69	33	78	13		12	17	1	154	13.5
70-79	21	52	19	1	7	14		114	9.6
80-89	2	6	4		1	5		18	1.5
90-99					4	3		7	.5
Total	607	242	56	4	192	76	2	1179	
Percent	51.4	20.5	4.7	0.4	16.3	6.5	0.2		100

Tacoma, Washington. An analysis of these cases, and a study of the data derived therefrom, has made apparent some interesting points which might have some clinical value. Some of this data are presented in Tables I to IV. The brief discussion which follows is presented to emphasize certain points.

Administrators.—The administrators included the author and two associates, who together administered approximately 70 per cent of the blocks; six residents in anesthesia, who administered approximately 26 per cent; and nine interns who administered the rest (4 per cent). It has been noted that after daily practice under supervision for three to four weeks, the novice becomes proficient in executing this block.

Age and Physical Status of Patients.—The ages of the 1,179 patients ranged from five years to ninety-three years, as shown in Table I. The youngest patient was one of the author's daughters who successfully underwent an appendectomy following injection of 5 cc. of 1 per cent xylocaine into the tenth thoracic interspace. This case is mentioned to illustrate that with proper premedication, children become excellent candidates for any form of regional anesthesia, including segmental peridural block. This procedure is especially useful in young patients who are to have emergency abdominal or lower extremity surgery and who have a full stomach. It is also indicated in old, poor-risk patients, provided that the anesthesia can be limited to a few segments such as obtains with herniorrhaphies and fractured hips. It should not be used if the operation necessitates extensive anesthesia because these arteriosclerotic patients do not tolerate the severe hypotension consequent to extensive sympathetic paralysis.

TABLE II. TECHNIQUES USED

Technic Used	No. of Cases	Percent
Single Injection		
a. Midline	602	51.1
b. Paramedian	443	37.6
Continuous Block		
a. Midline	78	6.6
b. Paramedian	56	4.7
Total	1179	100

TABLE III. AGENTS USED

Agents	No. of Cases	Percent
Procaine	117	9.9
Pontocaine	214	18.2
Xylocaine	487	41.3
Xylocaine and Pontocaine	361	30.6
Total	1179	100

Technique Used.—Anesthesia was produced with a single injection in 88.7 per cent of the patients, while in the rest the continuous technique was used. Many of the continuous blocks were used for relief of postoperative pain, peripheral vascular disease of the lower extremities, and for other therapeutic or diagnostic purposes.

The midline approach was the one most generally used in the lumbar, lower thoracic and cervical region, but in case of difficulty, the paramedian approach was used. In the midthoracic region, where the obliquity of the spinous processes is greatest, the paramedian approach was used for most cases.

Agents.—In the early phase of this work, procaine was the agent used for short procedures and pontocaine was used for long operations. Analysis of the cases done with procaine shows that this drug produced anesthesia in twenty to twenty-five

minutes and the block lasted sixty to seventy-five minutes. With pontocaine the onset of action was longer, being twenty-five to thirty minutes except other techniques. This is probably due to the fact that since approximately 1 to 2 cc. of solution is distributed in one segment of the peridural

TABLE IV. OPERATIONS PERFORMED WITH PERIDURAL BLOCK

Operation	Number of Cases	Average Site	Average Volume of Drug Injected (cc's)	Extent of Anesthesia	Average Duration of Operation (Minutes)	Failures
Neck						
Thyroidectomy	7	C4	5	C2—C6	87	2
Radical Neck Dissection	4				131	1
Upper Extremity (Bilateral Disease)						
Open Operations	4				73	0
Closed Operations	3	C7	8	C4—T2	36	0
Therapeutic	21				4½ das.	0
Chest						
Mastectomy	22	T5	12	C8—T9	148	3
Cardiac Operations	2	T5	7	T2—T8	173	0
Pulmonary Resection	18	T6	10	T2—T10	203	1
Thoracoplasty	11	T4	11	C8—T7	123	0
Exploratory Thoracotomy	23	T5	10	T2—T9	78	
Therapeutic	39	T5	8	T3—T8	3 days	0
Upper Abdomen						
Cholecystectomy	177	T7	11	T3—T12	95	8
Other Biliary Operations	52					
Gastrectomy	139	T8	12	T3—L1	187	3
Pancreas	7	T8	10	T4—T12	142	
Lower Abdomen						
Intestine	108	T9	12	T5—L1	135	7
Appendectomy	56	T10	12	T7—L4	72	1
Caesarean	27	T11	10	T7—L3	103	1
Gynecology	39	L2	14	T7—S3	88	0
Therapeutic	22	T11	8	T9—L2	2 days	0
Abdominal Wall						
Ventral Hernia	32	T10	12	T7—L2	87	0
Inguinal or Femoral Hernia	209	T12	11	T9—L3	82	9
Lumborenal	31	L1	11	T9—L4	143	0
Back						
Herniated Disc	19	L3	10	T12—S2	71	1
Manipulation of Fracture	8		8		27	0
Lower Extremity						
Open Operations	38	L4	14	T12—S4	141	3
Diagnostic or Therapeutic Block	61	L2	10	T10—L5	5 days	3
Total	1179					43

when using concentrations above 0.3 per cent, in which case it was as short as 2 per cent procaine. The duration of anesthesia with pontocaine was one hundred twenty to one hundred fifty minutes. During the past three years the use of xylocaine has increased the practicability of peridural block considerably because of its quick onset of action and long duration of effects. The 2 per cent solution is the best for it produces complete anesthesia in fifteen to twenty minute and lasts approximately ninety to one hundred twenty minutes.

Frequently we employed a combination of 2 per cent xylocaine and 0.2 per cent pontocaine obtained by adding 20 mgm. of the latter to 10 cc. of 2 per cent xylocaine. With this combination anesthesia frequently lasted as long as one hundred fifty minutes.

It should be noted that with all agents, the anesthesia following single peridural injection is much shorter than anesthesia which results from space, two intervertebral foramina and the paravertebral spaces, only a very small amount of the anesthetic comes in contact with nerve elements.

Regions Blocked and Operations Performed with Peridural Block.—For purposes of clarity the segments which can be anesthetized with peridural block have been divided into five categories—the upper cervical region (C2-C5), the cervicothoracic region (C5-T2), the upper thoracic region (T1-T6), the lower thoracic region (T6-T12), the thoraco-lumbar region (T10-L5), and the lumbosacral region (L1-S3). The relation of these regions to operations is obvious (Fig. 2).

Neck Operations.—Peridural block for thyroidectomy, radical neck dissections, and other neck operations affords the advantage of producing anesthesia with one injection. However, we found this region the most difficult in which to introduce the needle and encountered the highest per cent

of failures. This was perhaps due to the apprehension which one naturally has about inadvertent subarachnoid injection, which in this region would produce medullary paralysis even though only 4 or 5 cc. of solution are used.

Operations of the Upper Extremity.—Peridural block can be used to advantage whenever the patient has bilateral disease requiring anesthesia of both extremities. Our results indicate that the puncture is best performed at the seventh cervical

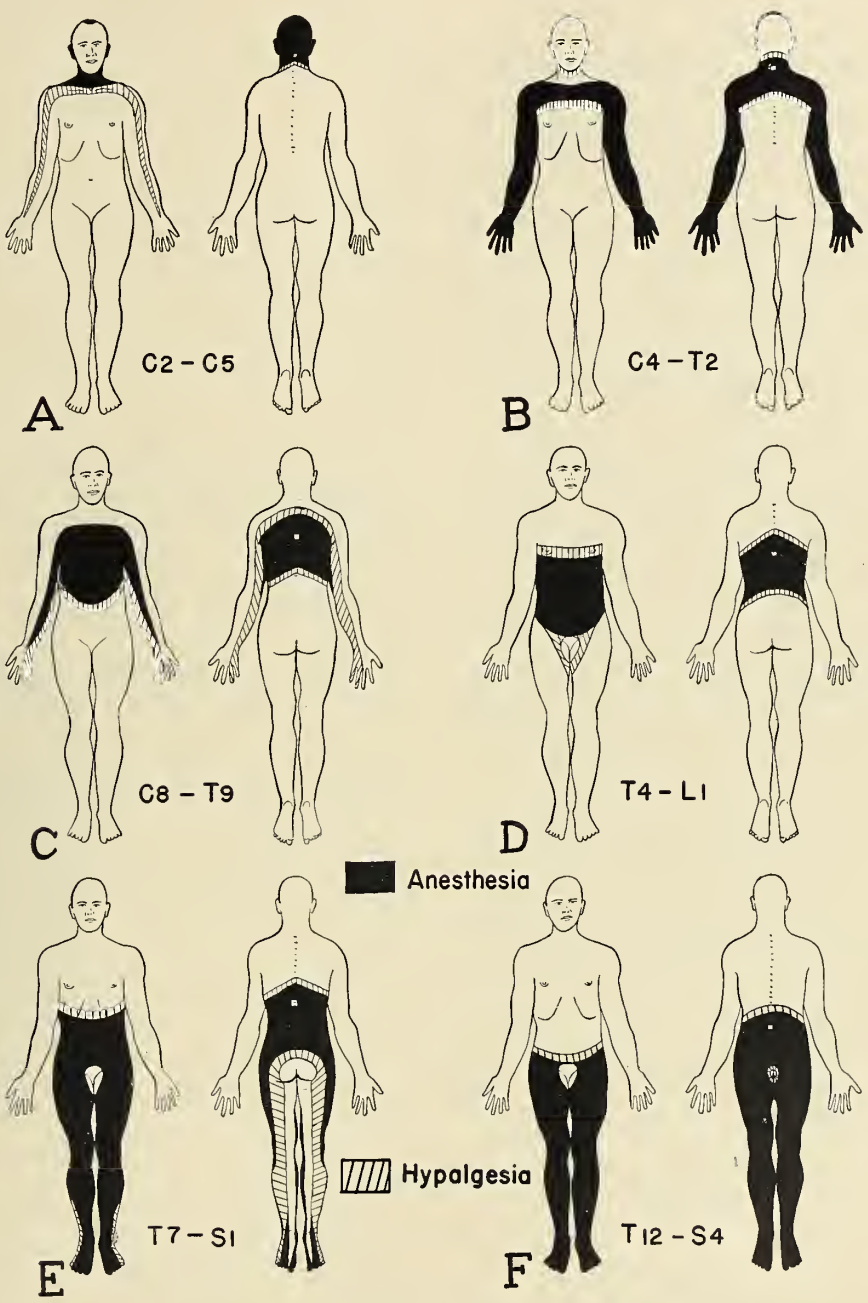


Fig. 2. Area of segmental anesthesia (black) and hypalgesia (cross hatching) following peridural block in various regions of the body. The white spot in the center of the black zone of anesthesia in the posterior views indicates the site of needle puncture. The interspace used is as follows: (*A*) 3rd cervical, (*B*) 7th cervical, (*C*) 4th thoracic, (*D*) 8th thoracic, (*E*) 1st lumbar, (*F*) 4th lumbar. (Bonica, J. J., "The Management of Pain," Philadelphia, Lea & Febiger, 1953).

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interspace with the patient flexed in the lateral position. As shown in Table IV, injection of 8 cc. usually produces anesthesia of all the nerves which take part in the formation of the brachial plexus.

Chest Operations.—Our clinical experiences have corroborated the work of Crawford, et al[4] with peridural anesthesia for intrathoracic surgery. We have no doubts that patients do better when peridural anesthesia is combined with light general anesthesia. The regional procedure obviates reflexes due to periosteal stimulation, the physiologic economy of the patient is less disturbed, and there is a long period of postoperative relief from pain. The two patients operated upon for mitral stenosis did exceptionally well with this combination.

Some of these intrathoracic operations were done with the continuous peridural technique, which was maintained during the postoperative period in order to afford prolonged relief from pain.

Segmental peridural block is an excellent technique for radical mastectomy because the hypotension consequent to the anesthesia reduces significantly the blood loss and the operating time.

Upper Abdominal Operations.—As is apparent from Table IV, segmental peridural block finds its greatest usefulness in upper abdominal surgery. Although some state that muscular relaxation with this technique is not as marked as with subarachnoid block, we have not found this to be so. By using 2 per cent xylocaine and/or 0.25 per cent pontocaine we have observed complete muscular relaxation and very quiet operating fields in most cases. This, combined with the fact that the lower extremities and the rectal and vesical sphincters remain unanesthetized, makes for ideal operating conditions and is very appealing to surgeons and anesthesiologists alike.

Other Operations.—Peridural block is especially advantageous in Caesarean operations; herniorrhaphies, both ventral and inguinal; lumborenal surgery, and operations on spinal column and the lower extremities because the zone of anesthesia is more limited. We have found this procedure particularly useful for chordotomies, in which case the segmental anesthesia does not interfere with testing of sensation in the unanesthetized lower extremities, perineum, and lower part of the trunk.

Complications and Failures.—Mild to moderate hypotension occurred in most patients undergoing thoracic or upper abdominal operations. This was either treated with vasopressors or intentionally ignored in order to minimize blood loss. In one patient 10 cc. of 2 per cent xylocaine was inadvertently injected into the subarachnoid space at the level of the eleventh thoracic interspace. This resulted in respiratory paralysis, severe hypotension, and loss of consciousness. Prompt artificial respiration, the administration of fluids, and 50 mgm. of ephedrine corrected these alterations and the operation was performed uneventfully.

In forty-three patients, or 3.6 per cent of the cases, anesthesia was inadequate for the proposed operation. It is obvious that although this procedure is at first technically difficult, it can be mastered by anyone who is persistent in doing it.

Summary

A technique of segmental peridural block, together with the possible complication which can occur with this method, have been described. In addition, the indication and contraindications and advantages and disadvantages of this method have been discussed.

An analysis of 1,179 cases in which peridural block was used is presented. The results obtained in these cases re-emphasize the usefulness of this method.

It is hoped that this presentation will stimulate those clinicians, who have not yet taken advantage of the benefits that can be derived from it, to employ this technique in their daily practice.

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Subarachnoid Hemorrhage with Special Emphasis on Its Management

By Spencer Braden, M.D.
Cleveland, Ohio

THE CONFUSION, or perhaps more correctly, the differences in opinion apparent in the literature relative to subarachnoid hemorrhage would in itself justify an attempted delineation of the problem. That it represents a serious one, and all too frequently is a threat to life, is at once apparent to one who has repeated experiences with the condition.

A rather marked element of vascillation continues to exist relative to a logical approach to a given situation in an attempt to evaluate a specific case, both as to the procedure of choice and the time at which it should be done.

It should be pointed out at the beginning that subarachnoid hemorrhage is a symptom and sign of disease and does not by itself represent a disease entity.

To review briefly, the general characteristics of the condition, the onset of the attack of bleeding, is practically always acute. Sudden headache, frequently in the back of the head, and of varying intensity but commonly excruciating, is the rule. This is followed by a disturbance in consciousness, varying from some lack of awareness to complete coma and prostration. Associated nausea and vomiting is not uncommon. Other signs, as a result of the blood in the cerebrospinal fluid, are usually apparent even to the casual observer. An aseptic meningitis perpetuates the headache for several days, produces nuchal rigidity of some degree with backache, discomfort in the lower extremities, a positive brudzinski's sign, frequently a positive bilateral babinski reaction, and a febrile response, all of which recede within a few days if the patient survives and has no further episodes of bleeding. A lumbar puncture establishes the presence of a grossly bloody spinal fluid, usually under some increase in pressure.

In the absence of trauma, as the obvious underlying cause for the blood in the spinal fluid a number of different types of lesions must necessarily be considered, many of which will not be obvious on clinical grounds alone. Brief mention should be made of some of the known causes of subarachnoid bleeding, exclusive of trauma, listed perhaps in the order of their relative frequency.

1. Aneurysms of the cerebral vessels, either in the region of the circle of willis or elsewhere, are undoubtedly the most common cause.
2. Arteriovenous fistulae located on the cortex not uncommonly manifest themselves only by repeated episodes of subarachnoid bleeding without other associated phenomena.
3. Intracortical hematomata occurring spontaneously from cerebrovascular disease of any nature may show the presence of blood in the spinal fluid during the acute phase.
4. Brain tumor, while not a common source of bloody spinal fluid, nevertheless deserves consideration, particularly when it occurs on the surface in some area permitting spontaneous bleeding into the subarachnoid space from the rupture of a thin-walled vessel or from the erosion of one.
5. Blood dyscrasias are on occasion manifest sometime during their course by subarachnoid bleeding.
6. Subarachnoid bleeding of spinal origin from vascular lesions within the spinal canal have been occasionally observed.
7. Last, there are those cases which defy, even with a battery of tests, the location of any lesion as being the responsible source.

Consideration relative to the management of lesions responsible for subarachnoid bleeding are obviously manifold. The first concern is the early determination of the nature of the responsible source of the bleeding and its accurate location.

Some remarks should be made relative to the differential diagnosis of these listed lesions and it is perhaps better to deal with them in reverse order, leaving until last the major contender. Bloody spinal fluid, usually under some increase in pressure, is common to all.

It is at once obvious that those lesions which defy determination of their nature and location, even by the use of specialized techniques, must of necessity be managed in an entirely conservative fashion. This entails prolonged periods of absolute bed rest, the control of intracranial hypertension when it exists in an embarrassing degree by the removal of spinal fluid, sufficient analgesics and hypnotics to control pain and restlessness, the

avoidance of enemata with the attendant straining and possible consequent rise in blood pressure which may accompany it and thus provoke additional bleeding.

Vascular intraspinal lesions, as a rule, are manifest by few, if any, cerebral symptoms with the major signs being referable to the spinal cord and spinal nerves, particularly as pertain to the lower extremities. Some degree of subarachnoid block may be present as determined by the queckenstedt test, or more specifically by a myelographic examination. Employment of the queckenstedt test in cases of intracranial bleeding would, of course, be contraindicated and uninformative. No one in this class of case, would seriously entertain a conservative program once the nature and location of the lesion had been determined, and particularly when there was evidence of interference of cord function. This would dictate an early laminectomy with surgical removal of the offending process, the control of hemorrhage, and decompression of the cord structures.

Blood dyscrasia should be readily recognized with a hemogram and the usual measures employed in their attempted management. In these instances it is the disease entity, as a rule, which has to be managed rather than the cerebral complication.

Brain tumor can frequently be suspicioned on the basis of some antecedent history, the presence of choked discs, and the association of a major neurological deficit in the face of a persisting intracranial hypertension. Ventricular air studies revealing ventricular distortion or shift indicative of a mass lesion are added proof. Since brain tumors do not lend themselves to a conservative regime, the treatment of these, of course, is early surgical removal of the tumor mass.

The spontaneously occurring intracortical hematomata may be difficult, if not impossible, to differentiate from a cerebral tumor in a relatively silent area, particularly when complicated by a hemorrhage into its substance. This condition is no respecter of age. This likewise in many instances does not lend itself to a conservative regime and when it is of sufficient size to produce neurological findings, in association with a persisting intracranial hypertension, it entails a craniotomy and removal of the clot with control of the bleeding after accurate localization has been established usually through the means of cerebral arteriograms or ventriculograms. They have, in addition to bloody spinal fluid, persisting intracranial pressure and the signs of a space occupying intracranial lesion with persisting coma, weakness, paralysis, and usually reflex changes.

Arteriovenous fistulae constitute a serious problem. Their location is usually only evident by arteriographic studies with contrast material, such as 35 per cent diodrast injected into the carotid artery. There seems to be little, if anything, of a conservative nature which has proved effective. X-ray therapy in the hopes of producing a fibrosis has been tried in the past and seemingly largely discarded because of its apparent ineffectiveness. Whether or not a direct attack upon the lesion through he medium of a craniotomy is feasible or advisable in a given case in an attempt to clip the major contributing vessel, coagulate the major mass of vessels, or surgically extirpate the anomaly is dependent upon many factors. Attention and careful consideration should be given to its location, extent, relation to important cortical areas, and the extent of collateral circulation. While it is possible to totally remove some, the removal or attempted removal of others may frequently result in the sacrifice of the patient or leave him with a disabling neurological deficit. There is little, if any, reason for generalities and the decision as to the management of the individual case in this category must be carefully weighed in the light of the available facts. The use of the newer types of hypotensive drugs in conjunction with anesthesia seems to offer a greater promise than heretofore in surgically dealing with these lesions where the control of operative hemorrhage is a major factor.

To one who has accumulated experience in dealing with aneurysms of the intracranial vessels, there is considerable reluctance in accepting recent statements in the literature to the effect that most patients with spontaneous subarachnoid hemorrhage recover without surgical treatment. My own experience dictates otherwise, and in some clinics it is considered almost a surgical emergency.

A fairly high percentage of patients with ruptured aneurysms have succumbed to their first attack within a few hours. Nothing, of course, can be done for these, except possible supportive measures. All too frequently, however, in those who are seemingly surviving the initial episode, sudden death will occur from a second attack within days of the first. Others have survived many attacks. The difficulty and, of course, the impossibility of

individually predicting this eventuality is inherent in the problem and lies in the realm of speculation. Aneurysms in the region of the circle of willis, not uncommonly in addition to subarachnoid bleeding, manifest themselves by the implication of certain cranial nerves. In the anteriorly placed lesions, the most common of these is the third cranial nerve with a dilated pupil, external deviation of the involved eye, paralysis of upward, downward, and internal movement, and a drooping of the upper eyelid or a complete ptosis. The second most common is the sixth cranial nerve as manifest by an internal deviation of the eye and a weakness or paralysis of lateral gaze. In the case of involvement of either of these nerves there will be a resulting diplopia or double vision, except when the ptosis is complete and so that no vision is possible from the involved side unless the lid be passively raised to permit it. These nerves, when implicated, are important focal signs relative to the location of the lesion. Other cranial nerves in the vast majority of uncomplicated cases are notoriously spared and sensory and motor signs are conspicuous by their absence.

It must be remembered however, that thromboses of major vessels can accompany a ruptured aneurysm and thereby complicate the picture by producing such gross neurological changes as hemiplegia. Equally true, an aneurysm may not only bleed into the subarachnoid space but by jet force at the time of rupture force its way into the brain tissue as well with the formation of an intracerebral hematoma, and thus one is confronted with two highly significant conditions, even though one is a result of the other.

In my own experience I have not infrequently seen subdural hematomata of clinical proportions associated with intracranial aneurysms and entirely unsuspected until the time of operation or discovered at postmortem examination. They only add further to the complexities of the management.

Any approach to the case in an acute attack of subarachnoid bleeding due to intracranial aneurysm should dictate some order of procedure. A lumbar puncture will reveal the bloody fluid and also the degree of associated intracranial hypertension. If the spinal pressure is unduly high or particularly if the cardiac or respiratory mechanisms seem to be suffering, the pressure should be reduced to a more nearly normal level by fluid removal. This, of course, can be repeated as indicated by the patient's general condition.

A critical neurological examination should be made frequently for evidence of focal signs.

Absolute bed rest, as in the unidentified case, with the use of hypnotics and analgesics for the control of pain and restlessness to avoid fluctuations in blood pressure, are practically always necessary and indicated in an effort to prevent continued or recurrent bleeding.

Likewise the use of the enema at any time during the acute phase because of the straining and consequent rise in blood pressure which may accompany it and provoke additional bleeding is contraindicated.

Practically every case of suspected intracranial aneurysm should have a contrast arteriographic study as early as the patient's general condition will permit. Recent experience has shown that this procedure is reasonably safe when carried out in the acute phase. This is the only way in which an aneurysmal type of lesion can be adequately surveyed from the standpoint of the vessel involved as well as the size, shape, and location of the sac. Only then can one decide upon the course of action appropriate for the lesion at hand. Bilateral carotid arteriograms should be done because of the possibility of a bilateral lesion. X-rays should be made in both anteroposterior and lateral projections and when possible stereoscopically. Since approximately two-thirds of the intracranial aneurysms involve the anterior portion of the circle of willis in some of its parts, vertebral arteriograms are less often necessary and the lesions, when demonstrated, are more often inaccessible.

The ideal objective of treatment of an intracranial aneurysm should be to eliminate the aneurysm and preserve or leave intact the circulation. This is not always possible for a variety of reasons. Because of this, other procedures have been widely advocated.

There are those who feel that ligation of the common or internal carotid arteries in the neck is an effective procedure from the standpoint of reducing the pressure and diminishing pulsatile flow in the region of the damaged area. The reason for this, of course, being to prevent further bleeding and to permit fibrosis and healing. Some have advocated this on an empirical basis only while others have supported their premise with arterial pressure measurements in the neck distal to the point of ligation where an acute reduction

in pressure has been routinely observed. This has given further popularity to the procedure.

Differences in data and opinion exist as to how long the reduction in pressure is maintained after carotid artery ligation in the neck. My own experience, with both the acute and chronic pressure measurements, indicates a rather prompt return of the pressure to nearly its original level, thereby casting doubt on the efficacy of this procedure alone. Additional data, relative to pressure determinations from the chronic standpoint and pertinent to the individual case, is necessary before valid and warranted conclusions are in order. Some patients, of course, will not tolerate carotid artery ligation without producing hemiplegia and whether or not this is likely to happen should be ascertained if possible in advance.

Later the trapping operation devised by Dandy entailing ligation of the carotid artery in the neck and clipping of the involved vessel intracranially distal to the aneurysm was and continues to be extensively employed. The lesion with this method was thought to be left in an isolated stagnant area of the circulation and thereby rendered incapable of further bleeding. However, information relative to anastomotic relationships between the external and internal carotid systems of the same side, and between the two sides, has apparently not been too seriously considered. Recent data by Woodall and some personal experience shows that a significant degree of pressure is evident in the isolated segment despite the trapping. Whether or not it is usually effective in preventing repeated episodes of hemorrhage will have to wait a more critical analysis of cases and a further lapse of time. There are some cases which will of necessity lend themselves to this procedure alone because of the impossibility of doing anything else.

The direct intracranial approach to the aneurysm, when accessible, in an attempt to clip or ligate it at the base, more nearly realizes the objective but is unfortunately attended by a greater risk. Manipulation of the sac incident to the ligation may result in rupture with serious hemorrhage difficult to control and the operator may be forced in a life and death struggle to ligate a major vessel with the inevitable consequences. The risk, however, must be assumed. Again the use of the newer hypotensive technique, such as hexamethonium bromide, seems to offer considerable promise in obviating this difficulty. Associated subdural or intracerebral hematomata have to be dealt with surgically in addition to the aneurysm. In one instance in my own experience all three conditions were present in the same case.

In summary then a brief outline of the clinical picture of subarachnoid hemorrhage is presented. The types of lesions known to be the responsible source are listed with mention of associated complicating factors. Some comment is made on the proposed management of each. The importance of pressure determinations in individual cases is mentioned.

In conclusion, on the basis of available information few, if any, generalities are warranted. Each case must be judged from the standpoint of management on such merits as the nature of the lesion, its location, accessibility, and type of procedure best equipped to handle the specific problem.

1304 Hanna Building

A PHYSICIAN'S OBLIGATION TO THE COURTS

(Continued from Page 161)

nesses *for the information of the court,* to testify regarding the technical matters at issue, and would be paid for as part of the general expenses of the trial. In addition, it would be of further help if the English custom were adopted in which the court itself is free to take over the witness for further questioning.

Under such a system neutral expert witnesses of high qualification would be available to inform the Court on technical matters, particularly when markedly diverging opinions had been expressed. Furthermore, such a system would have the indirect effect that opposing attorneys would be more likely, in calling expert witnesses of their own, to select someone known to be on the panel, rather than one who, for one reason or another, had not been so designated. This would tend greatly to improve the quality of all expert testimony, to the benefit of court procedure on the one hand, and on the other, to increase the esteem of the public for such technical testimony—which last, unfortunately under present practice, has often fallen to a low ebb.

10 Peterboro Street

Weight Gain through Sedation in Malnourished Children

By Mario S. Cioffari, M.D.
Detroit, Michigan

ASIDE FROM the acute conditions, malnutrition is one of the commonest reasons for bringing a child to the pediatrician. The causes may be numerous, or difficult to find, and no single method of treatment applies. There are many with complaints of poor appetite and malnutrition, who, on physical examination, are actually well nourished. Nothing is done for these except some general directions about psychology at meal times. The ones we are really concerned with are those who measure 10 per cent or more under the average weight[3] and have not been able to gain. This study was conducted in an effort to improve the latter group.

Taking a general view of the situation, most of the malnourished children seemed to fit into the anxiety type, and working on this idea, it was decided to try a bitter-sweet sedative before meals, to get both the appetizer and the quieting effect at meal times. All barbiturates in solution are bitter; pentobarbital, however, in the form of Elixir of Nembutal,®* seemed to be acceptable to the children, and to fill the bill.

In this study, one-half teaspoon of the elixir, containing ⅛ gr. of nembutal sodium, was given three times daily to the smaller children, and one teaspoon, containing one-quarter grain, to the older ones, from about seven to eight years of age upward; larger doses defeat their purpose because of drowsiness. In the group under observation, the majority of the children did very well, and the results are tabulated in Table I and II.

Analyzing the above tables: out of forty children in this study, 92.5 per cent had improved appetites, and gained anywhere from one to six pounds, for an average of two pounds per person, and at an average rate of two pounds per month. The remainder, 7.5 per cent, showed no gain and questionable improvement in appetite. There was no apparent difference in results between the sexes.

*Abbott and Company.

TABLE I. RATE OF GAIN

	Male	Female
3 lb./wk.	1	
2 lb./wk.		2
1 lb./wk.	5	5
2 lb./mo.	5	5
1 lb./mo.	7	7
No gain	1	2
Totals	19	21

TABLE II. TOTAL GAINS

	Male	Female
6 lb.	1	1
5 lb.		1
4 lb.	1	
3 lb.	2	3
2 lb.	7	7
1 lb.	7	7
No gain	1	2

Comments

These children had all been checked for anemia, had tuberculin tests and urinalyses, and were all getting adequate vitamins. Some of the mothers had tried different brands of vitamins, and some were giving two to three times the average dose, with no apparent benefit. It was found that when starting vitamins, the appetite may increase in underweight children, but usually levels off later,[5] while in those with good appetites, and good nutrition, the increased appetite will continue.

The majority of the children in this study were of the anxiety type, small boned, nervous, jittery, sensitive and continually under tension; they were easily upset and afraid of everything new and different. This tension destroys appetite or disturbs their metabolism, and they do not get full benefit out of what they do eat. Some sensitive older children may deny themselves food as a self-punishment for a guilt-feeling.[4] Because of this type of constitutional make-up, they may continually suffer from this sense of guilt about trivial details, so that their appetite is always interfered with. Even in the matter of eating and appetite, one is guided by feelings and not by logic.[2]

From the first day on, the mother usually noticed the sedative effect, and the improvement in appetite; from a hyperkinetic behavior, the child became more normal in reactions to his environment. In some, no difference was noted in the amount eaten, but the child gained anyway, apparently getting more benefit out of his food.

We found one important factor which was very difficult to overcome, and that is the type of family constitution. If that is asthenic on both sides, any measure of success with the child will be a

struggle. These children may put away enormous quantities of food and still show no gain.

Those who improved the most, usually gained rapidly from the beginning, and contrariwise, those who gained poorly, continued the same rate or stopped early. The medication was stopped when the child showed no further gains, or minimal ones. It may have been coincidental, but most stopped improving as they approximated their average weight.

One of the impressions gathered from this study was that if a malnourished child succeeds in passing a certain critical point in weight, he will not only maintain his average weight, but sometimes will continue to gain and may actually become fat. Patients in anxiety states were found to have increased glucose tolerance,[1] but with better nutrition, most of the anxiety goes, they acquire a better outlook on life, and their metabolism becomes adjusted to the new conditions.

Summary and Conclusions

1. Forty malnourished children received ¼ to ⅛ gr. of pentobarbital, in the form of Elixir of Nembutal, three times daily before meals.

2. Of this number, 92.5 per cent ate much better and gained from one to six pounds during the period of observation, at rates varying from one pound per month to three pounds per week; 7.5 per cent showed no gain and insignificant changes in appetite.

3. Pentobarbital, in the method used here, is a useful adjunct in the treatment of malnutrition in children. It seems to be of special benefit where no physical causes can be found.

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DON'T KILL YOUR DOCTOR!

Suppose you're a doctor. Just as you are about to climb into bed, the 'phone rings. One of your patients has taken a turn for the worse. You answer the call: you know it's serious.

Ninety minutes or so later you drag home only to find that another call has come—to tell you that Mrs. X is having her baby. That develops into a siege which robs you of a night's sleep; you might, if you are fortunate, get as much as an hour before facing your regular daily round of hospital calls and an office full of sick people.

It can go on like that until every nerve in your body is screaming for sleep. Then one night a total stranger, Mary Jones, calls: "My baby is dying, Doctor! You've got to come!"

What do you do? You don't know the woman—maybe the baby really is sick. So you ask, "Who is your regular doctor, Mrs. Jones?"

The pause is significant. "Well, I've had Dr. A. a couple of times, but I don't care for him."

"Did you call him tonight?"

"No."

So you feel that perhaps Dr. A. knows Mrs. Jones as one of those hysterical night callers. You, tired, longing for sleep that has been denied for days and even weeks, what do you do?

You know from experience it's a good chance that if you go, you'll find Mrs. Jones with only a mildly ill baby, that possibly the reason she doesn't like Dr. A. is that he went the first time and discovered the baby only slightly ill, and that Mrs. Jones merely had worked herself into a state. Subsequently, Dr. A. had suggested that Mrs. Jones bring the baby around to the office the next time—in the morning.

But suppose you don't go and the baby dies? It has happened; it's the old story of "Wolf, wolf!" and just as in the old story there sometimes comes a real wolf.

How are you, the doctor, going to protect yourself from the false wolves? How are we, the public, going to protect ourselves when the wolf is real?

The answer is that both can be protected if you, as a patient, will follow these six rules:

1. Choose a doctor in whom you have confidence and stick with him. All doctors have a reasonable degree of competence, else they could not have passed their medical-school examination. Your physician, if he knows you, will know whether a 2 A.M. call is justified.

2. See the doctor at his home or office during regular hours if you possibly can. Treatment facilities are better there, and he shouldn't be forced to work under any more handicaps than absolutely necessary.

3. Emergencies aside, when one of your family is ill, call your physician between 6 and 8 P.M. Don't wait until 3 A.M.

4. If you need a doctor in an emergency and you don't have a regular physician, don't go down the list of physicians in the 'phone book and call them one after another. You will have greater success if you (1) use the special number set up by 400 county medical societies to take emergency calls, (2) call the operator, or (3) call the nearest hospital and ask for the name of a physician who would be available.

5. If you must call the doctor in the small hours, don't insist that it's an emergency. Describe the situation calmly and let the doctor decide.

6. Finally, if you look on each minor illness as a major crisis, don't blame the doctor if he thinks you are calling "wolf" when you need him most.

—Jay Carroll in *The Rotarian*, December, 1953

William Stewart Halsted

By Alexander Blain, III, M.D.
Detroit, Michigan

EVERY PAPER I have seen or speech I have heard about the life of Dr. William Stewart Halsted, America's foremost surgeon, has been written by some distinguished pupil, colleague or friend of this eminent scholar. The risk of my seeming presumptous in undertaking a discussion of his life and work is a calculated risk and has been assumed for the following reasons: First, 1952 has been celebrated throughout the entire surgical world as the centennial year of Halsted's birth and this seems the most appropriate time for us to participate in his celebration. Second, Halsted's stature is such that he belongs to all time, and the time for his accomplishments to be evaluated by members of a newer generation, men who were not his close associates, is at hand. Third, while I can make no claim to being a member of the Halsted School of Surgery, I have been intensely interested in his life for some time. While not a graduate of the Johns Hopkins University School of Medicine, the school with which his name will ever be associated, it was my good fortune to have worked, at the beginning of my professional life, for some three years, under the influence of those who knew him well in the institution to whose name he brought such fame.

These three years began with an internship at the Johns Hopkins Hospital under the direction of two of Halsted's most brilliant pupils, Hugh Hampton Young, urologist, and Walter Dandy, neurosurgeon. This period was followed by a year as assistant pathologist, under Dr. Arnold Rich, the successor of Welch and of MacCallum to one of the most distinguished chairs of pathology in the United States. Finally, there was the year (1945-46) of tenure of the William Stewart Halsted Fellowship in surgery under the direction of Halsted's brilliant successor, Dr. Alfred Blalock. During these years, there was stimulating contact also with Drs. William Rienhoff, Harvey Stone, Warfield Firor and others of the Halsted school. Further, there had been an opportunity to know, at least casually, McClure of Detroit, Holman of San Francisco, Davis and Crowe of Baltimore and a few other leading American surgeons, themselves products of Halsted's teaching.

Of the Halsted Fellowship in Surgery, the President of the Johns Hopkins University, Frank J. Goodnow, stated at Halsted's death in 1922, "It is only characteristic of the man that when he died he not only left us the lustre of a name that will always be honored by Hopkins men, but as well made the University his residuary legatee in order to enable it more adequately to carry on the work which he had so auspiciously begun, namely, research in surgery." To which Dr. Blalock added, "I am sure Halsted would be pleased that recipients of the Halsted Fellowship have made significant contributions to surgery."[1]

My good fortune continued, and after leaving Baltimore, I was able to complete my training under the direction of one of this country's leading surgeons, Dr. Frederick A. Coller, professor of surgery at the University of Michigan. Interest in the life of Halsted had continued, however, to the extent that I have become familiar with all of his publications, many of them outstanding models of medical writing and research.

With the foregoing statements by way of explanation, and if you wish, apology, for the temerity of this presentation, we shall consider some of the aspects of Halsted's life, his contribution to surgery and also, certain controversial subjects regarding his originality, surgical technique and drug addiction. It should be stated clearly that the material to be presented is based on no first-hand knowledge, and that no implication is intended that something new or original is being contributed. I have borrowed, with complete lack of restraint, from the writings of Halsted himself and from the writings of his colleagues and pupils.

Background and Early Years

William Stewart Halsted was born in New York, September 23, 1852. His family who came to America in 1660, can be traced back to the sixteenth century in England, where it occupied an estate in Rowley Parish called High Halsted. William Stewart was born into an atmosphere of wealth and luxury, and during his first ten years appears to have been taught at home by a governess. He graduated from Andover in 1869 and from Yale in 1874. While at Yale, his chief interest seems to have been in athletics, particularly

From the Department of Surgery, Alexander Blain Hospital. Presented at a meeting of the Prismatic Club, Detroit, December 31, 1952.

football, crew, wrestling and boxing. In his senior year he was captain of the football team that played against Columbia, November 16, 1873. His classmates agreed that he could have easily stood in the first division of his class had he been more interested in his studies. He was a member of Psi Upsilon and while a good dancer, is said not to have gone in much for social activities. He was generally popular with the student body, and was even then, careful in matters of dress. He did not drink and was at least moderately interested in medicine. In his senior year he purchased a copy of Gray's Anatomy and of Dalton's Physiology which he studied with care.

After his graduation from Yale, he entered the College of Physicians and Surgeons in New York and in 1876 passed the examinations for internship at Bellevue Hospital. According to Heuer's monograph on Halsted,[7] there were ninety-five patients admitted between October 1, 1876 and May 1, 1877 to the service on which Dr. Halsted was an intern. "An analysis of the conditions for which these patients were admitted shows that fifty were simple fractures or dislocations, four were compound fractures, eight gunshot, pistol or stab wounds, ten other wounds, burns or frostbite, eight urological conditions, two skull fractures, two synovitis of the knee joint, four simple rectal conditions, and one painful amutation stump and one cancer of the breast. The last was treated by simple mastectomy."[7] In the Spring of 1877, he received his M.D. degree and within the next year he became acquainted with William H. Welch, an event which was to profoundly influence his life. Welch had just returned from Germany where he had been working in the laboratories of Julius Cohnheim and others. Halsted soon followed his example and sailed for Europe to study the basic sciences. At that time, the dawn of medical science was making its appearance in Germany, Austria and elsewhere. In America, there was not only not the medical leadership that exists today, but medical education was in a rudimentary and deplorable state.

"There were many medical schools, none of university caliber, and all proprietary, whereas there were about twenty university medical schools in Germany. About this time Johns Hopkins, a Baltimore merchant and banker, left his fortune for the establishment of a university and hospital, the latter to be a part of the medical school of the university, for which he had made ample provision in his will. The carefully chosen Boards of Trustees of the two institutions selected Daniel C. Gilman as President of the University, John Shaw Billings as Medical Advisor and William H. Welch as Dean of the Medical Faculty and Professor of Pathology. These appointments need no defense, for they resulted in the establishment of one of the first important schools of postgraduate study in the United States. Gilman, in particular, revealed a remarkable ability to choose outstanding young men. The faculty in 1901 was one of the most distinguished faculty groups ever gathered together in a single university, and it is particularly significant that this was when a young school with a small faculty."[1]

In Europe, Halsted spent two years which later proved of inestimable value to the future of surgery in the United States. Among other studies, he attended courses in pathology with Chiari, in diseases of the skin with Kaposi and in anatomy with Zuckerhandl. He also attended the surgical clinics of Billroth and Braun. He was greatly impressed by the magnitude of the operations and by the surgical skill of Billroth and his assistants, particularly Mikulicz. At that time, Billroth had not yet performed his first resection of the stomach and Halsted did not recall seeing any operation for goiter, operations for which Billroth was later to become famous. In the Spring of 1879, Halsted left Vienna for Wurzburg where he attended the surgical clinics of von Bergmann. Later he visited Leipzig and Halle where he spent several profitable weeks with Volkmann. He then went to Hamburg where he saw Schede, and to Kiel where Esmarch was active. Among the older great surgeons whose work he studied during this period were Thiersch and Woelfler.

Thus, from an early training, narrow in scope, Halsted had received by this period of European study an insight into the limitless boundaries of surgery as being developed abroad under the impetus of antiseptic techniques, progress in anatomy, physiology, embryology, pathology and bacteriology and specialization in investigation and practice. Koenig writing in 1877, says:

"With joy we see how our attitude toward the patient has changed. Heart and hand are no longer tied by the fear that operation may be fatal through accidental infection.

"The coming generation will perhaps know only from the records of long past times of the doubts and difficulties of surgeons as to whether this danger may not be so great as to forbid the healing operation. It is Joseph Lister who has set us free from this fear and allowed us to extend our operative activity in an undreamed of way."

To illustrate the contrast between surgery as it was practiced at this time in Austria and Germany and as it was being practiced in this country, Halsted upon returning to New York to work with Sands, ordered a full dozen artery clamps for use in surgical operations. This seemed extravagant to Sands who asked, "What shall we do with so many?"

The New York Period

In 1881, he was appointed surgeon to the Charity Hospital on Blackwell's Island and there followed many other similar appointments, including that of Chief Surgeon to the Emigrants Hospital on Ward's Island, his appointment to the surgical staff of the Presbyterian Hospital and Bellevue Hospital. This period has been covered in a recent communication by Dr. Allen O. Whipple and for our purposes probably its chief features include, his developing an outstanding reputation as a quizzmaster and a fast, bold and prodigious operator, his contact with Welch, his discovery of regional nerve block anesthesia and his resulting addiction to cocaine. This period was characterized by a tremendous enthusiasm for his work, amazing energy, strength and endurance.

"Regular hours of teaching in the dissecting rooms of the college, a quiz of sixty-five or more students at his house, daily attendance in the morning at the Roosevelt Hospital Dispensary, services at Bellevue Hospital, Presbyterian Hospital, Charity Hospital, Emigrant Hospital and Chambers Street Hospital, in all of which he was active on the wards and in the operating rooms, day or night. This forms a schedule of work which only a man of boundless enthusiasm and amazing strength could have encompassed in twenty-four hours."[7]

In addition to this, he found time for original work, and in 1884 following Kaller's announcement at the Heidelberg Ophthalmic Congress that the newly discovered drug, cocaine, would render insensitive the conjunctiva and cornea of the eye, Halsted immediately began to study this drug as a local anesthetic for surgical operations. He, together with his associates, Richard Hall and Frank Huntley, in all innocence, used cocaine not only in numerous operations but experimentally upon themselves. The tragic personal consequence of this study is now well known. Halsted and some of his associates became cocaine addicts.

There are two great controversies about this study. The first concerns itself with Halsted's priority as the discoverer of nerve block anesthesia and the second concerns the question of whether Halsted ever conquered his addiction. For the sake of brevity, it can be stated that Halsted was proved to have priority in this discovery. The interested reader is referred to the fascinating aspects of this proof in the two papers by his friend, Rudolph Matas.[11,12]

"Barely six months before Halsted's death, the fundamental importance and significance of his great discoveries in local and regional anesthesia were duly recognized by the American National Dental Association. After the painstaking investigation of a committee headed by the distinguished dentist, Dr. E. Edmund Kells of New Orleans, this representative body presented him with a beautifully designed gold medal which gave him full credit as the originator of the method of neuroregional anesthesia which has proven of such incalculable service in oral and dental surgery."[11]

As a result of this contribution a general law was formulated, which can well be called "Halsted's Law," namely, that the infiltration of a sectional area of a sensory nerve trunk or path, with an analgesic substance, is equal to the anesthesia of its peripheral distribution. This is in essence, the very foundation of all the present and most useful method of regional anesthesia.[11]

The final answer to the cocaine addiction controversy carries so much emotional impact that Heuer's monograph on Halsted was almost never completed. Heuer was so anxious to find unquestionable proof that Halsted had conquered the habit, and the proof was not forthcoming, that he delayed its publication for many years. MacCallum[10] and most of Halsted's closest associates believed that Halsted had conquered his addiction. There were a few who believed otherwise, including a well-known surgeon who during a discussion of MacCallum's biography of Halsted pointed out:

"The very abrupt change in Halsted's nature when he moved from New York to Baltimore; that he had been a vigorous, rather showy, didactic, bustling individual; that he became a very refined and most punctilious and fastidious individual. In the interim, between New York and Baltimore, he acquired the cocaine habit. The real truth of the matter is, he never conquered it. There are several proofs of this and perhaps MacCallum should have faced it, for he must have known it and should have published it in his book, for it would have been a wonderful story of a person who, like DeQuincey, carried a pernicious habit to old age and death unbeknownst to the rest of the world."

It is a question whether a man could have over a period of time, constantly taken the drug without

suffering the marked deleterious effects upon mind and body the drug is known to produce. Such effects were not present, for until his death in 1922, Halsted's mind was as keen and alert and his interest in surgical problems as intense as ever.

Of all that has been said on this subject, the most pertinent was said recently by Margaret Boise, R.N., Halsted's anesthetist, who stated that all known facts should be related and that it is for the individual reader to judge for himself which road Halsted followed: "The courageous and victorious fight against the enemy, or the equally courageous thirty years of fruitful activity with the haunting enemy always at hand."[2]

Baltimore

Following more than a year of disability (due to the use of cocaine), during a part of which he was hospitalized in Rhode Island, Halsted joined his close friend, Welch, who had assumed his duties as Dean and Professor of Pathology at Johns Hopkins. The hospital and medical school had not yet been built, but there was a laboratory of pathology in which Welch had gathered together a group of brilliant young men, including Mall, Councilman, Nuttal, Walter Reed, Abbott and Flexner.

As Blalock has stated, the time and conditions were ideal for a person of Halstad's ability, interests and training. According to Councilman, later Professor of Pathology at Harvard, Halsted repeated many of Lister's experiments and found that cultures made of wounds after the most meticulous observance of the Lister methods still showed the presence of bacteria. Councilman said:

> "This led to a careful microscopic study of wounds and the realization that care in operating, the exact approximation of surfaces and the avoidance of dead spaces was as important for the results as the supposed avoidance of bacteria—the study of hand disinfection was no less thorough and this led to the realization that the hands could not be sterilized, and finally to the use of rubber gloves in operating."[1]

The Johns Hopkins Hospital was opened in 1889, and Macewen of Glasgow was offered the position of Surgeon-in-Chief. After the position was declined by Macewen, Halsted was appointed. Because the hospital was opened several years before the medical school, and because of the staff's interest in teaching as well as in research, an excellent system of postgraduate education was developed, the residency system. Welch said:

> "Here Halsted, first in America, created a genuine school of surgery. He shares with Osler and with Kelly the credit of organizing the clinical services according to a plan whereby it was rendered possible for the young resident surgeons and physicians, appointd on indefinite tenure, to be trained during long periods of time for the higher academic and professional careers."

In the opinion of many, the greatest contribution of the Johns Hopkins University and Hospital to American medicine has been the residency system.

Halsted's Contribution to Surgery

It is very difficult for all of us not to take for granted the present high development of surgery or to appreciate Dr. Halsted's rôle in this development. At the time that Halsted entered the field of surgery:

> "The fundamental principles of surgery having to do with the prevention of infection, with the control of hemorrhage, with the handling of tissues, with drainage and with wound healing were just beginning to be appreciated in a scheme of surgical procedure. Local and regional anesthesia were unknown. The cranial and thoracic cavities had been approached only in accidental injuries, and brain surgery and thoracic surgery as we know them today had not been developed. Surgery of the thyroid was just beginning, there was no successful operation for cancer of the breast, no successful treatment of hernia. A gastric resection had not yet been done, intestinal resection with suture could scarcely be contemplated. In this country, surgery of the gallbladder and biliary tract was almost never considered."[7]

There were many other limitations, too numerous to mention.

At Halsted's death in 1922, he left us (based on his thorough appreciation of sound basic principles in surgical technique and his fertile imagination) superior contributions to the problem of intestinal anastomosis, to the treatment of inguinal hernia, to the radical treatment (and cure) of carcinoma of the breast, and to the therapy of hyperthyroidism and of aneurysm, as well as to the solution of other problems.

The Hunterian Laboratory was opened in 1905. In its forty-seven years of existence, there have been more than one hundred investigators carrying on their researches in it. Firor[5] states: "A laboratory is not merely a place in which to work. It is not just a collection of apparatus, but is, in essence, an atmosphere created by those who work within its walls. To borrow from Milton, one might say that laboratories, like books, are not altogether dead things, but do contain a potency of life in them to be as active as the soul whose progeny they are."

In connection with the teaching of third-year students in this laboratory, Halsted in a letter to Welch wrote, "I should be sorry to have it forgotten that I initiated the operative course on animals." For many years this laboratory was directed by Harvey Cushing, one of Halsted's most brilliant pupils. During the years, some of this country's leading surgeons and professors of surgery have studied there, many under the tenure of the Halsted Fellowship. Firor has said that, "The spirit of inquiry, the interest in basic problems, and the excellence of performance are still dominant. It is reassuring to believe that the Hunterian laboratory will continue to pass on the spirit of Halsted from one generation to another."

This laboratory where so much of Halsted's investigation was carried out, and where so many of his pupils were encouraged to make fundamental contributions to surgery, is close to the hospital and plays its part still in the residency system of training which Halsted created.

Halsted's system, modified from the German System was described in a memorable address at Yale in 1904. At that time, Bloodgood Cushing, Mitchell and others had been trained under this system. In addition, Halsted interested young men in various special fields of surgery, placing Cushing and Dandy in neurosurgery, Young in urology, Baer in orthopedic surgery, Davis in plastic surgery, Baetger in radiology and Crowe in otolaryngology. These men in turn used the residency system in training men in their specialties.

Carter[3] presented a paper at the Halsted Centennial Celebration in Baltimore, February, 1952, which consists of an analysis of the attainments of the seventeen resident surgeons and fifty-five assistant resident surgeons trained by Halsted, and of the 166 second generation resident surgeons trained by his resident surgeons, a total of 238. In this group there have been thirty-seven professors of surgery, fourteen clinical professors, eighteen associate professors, fourteen clinical associate professors, seventeen assistant professors, sixteen clinical assistant professor, twenty-three instructors and ninety-nine private practitioners of surgery. Carter concludes that were Halsted alive today, "The group which would intrigue him most would be those 166 men who represent the second generation of resident surgeons. For they are the ones to whom it is now given to carry his torch and to create a third and larger generation of surgeons, who will also be imbued with the principles of their remarkable progenitor, William S. Halsted."

Thus, you see "the fruition of Halsted's concept of surgical training," and how it has effected the development of surgery in the United States; how it promises to provide in the future many more outstanding investigators and clinicians of the Halsted school or the "safe school of surgery."

Time does not permit a detailed discussion of each of Halsted's contributions to surgical science. Furthermore, nothing that I or anyone else can say will add to their importance. The facts speak for themselves, and no one is more modest about them then was Halsted himself.

Leriche,[9] in speaking recently of these contributions mentions, among other things:

"Halsted was the first one to think of re-injecting lost blood arterially. He set the operative procedure that we all employ for cancer of the breast. Through his experimental studies he was a decisive influence in the surgery of the thyroid, parathyroid and thymus hypertrophy. He discovered the law of the grafting of glandular tissues. Finally, his contributions to vascular surgery is one of the most important up to modern times, and even in that field of surgery his influence is still evident here since Blalock is continuing Halsted."

Need I add that his monographs on goiter, on the ligation of the common iliac and of the left subclavian arteries are models of perception and precision?*

"Finally, he founded a school of surgery whose splendor has no equal, except in the brilliance of Billroth's students.

"To be perfectly truthful, each one of us if he is sincere with himself must recognize that he depends, to a certain extent, on the teachings of Halsted."

It would not be possible to improve on the discussion given by Matas regarding Halsted as a surgical technician which appeared after Halsted's death. For this reason this discussion is reproduced here.

"Allow me to detain you for a brief space with a few reflextions, suggested by the commentary, occasionally heard, that Dr. Halsted was not what is popularly described as a 'brilliant operator,' a statement which might

*As an example of the beauty of his writing, the following quotation relating to vascular surgery and taken from his article on ligation of the left subclavian artery for aneurysm will serve well.

"In ligating the first portion of the left subclavian within the chest the operator may not, as formerly, be more greatly impressed by the magnitude and cleverness of his performance than by the miraculous effect of the ligation of the artery upon the great, pulsating tumor which with each beat of the heart jarred the whole frame of the sufferer. The moment of tying the ligature is indeed a dramatic one. The monstrous, booming tumor is stilled by a tiny thread, the tempest silenced by the magic wand."

be interpreted as depreciatory of his technical abilities by those who are unfamiliar with his aims as a surgeon and the principles that governed his operative acts. If by 'brilliant' we mean the surgeon who utilized his opportunities to dazzle the public with the prodigies of his skill, who listens for the plaudits of the multitude more intently than he does to the murmured approval of his conscience, and who burns his incense to the gods of the gallery, then, we must agree, Dr. Halsted was not one of that class. But, what do we mean by a brilliant operator? In the sense in which it is most commonly used, brilliancy is a quality whose chief characteristic is speed, the quickness and dexterity with which an operator executes and accomplishes the operative act. This is a quality in which our forefathers excelled, to acquire which they bent all their energies, and in which they vastly surpassed us. In this respect, we, the surgeons of the present generation can no more compare our performances with theirs than we can make comparison between the speed of a horse car and that of a twentieth century limited railroad express. But when we consider the effects of a collision between horse cars, on the one hand, and railroad trains, on the other, including the wreckage that follows in each case, we may form some idea of the relative effects of speed as applied in the cyclonic operation of the older surgery and the calm but sure and safer motions of the surgery of the present. Happily for us and for humanity, the time has long passed when surgical brilliancy and ability could be gauged by the clock, or when the relative merits of surgeons could be estimated by the rules of the prize ring or the authoriy of the Marquess of Queensbury. That was well enough in the dim days of antiquity, in the days of Galen and Celsus, when limbs of conscious men were amputated with an axe or a guillotine; or in much later days, when a Lisfranc, a Dieffenbach, a Lizars, or a Liston, could disarticulate a hip in five minutes or less, provided that in the flourish of blades, one or more of the assistants were not put *hors de combat* by the lightning maneuvers of the operator; or that one could say of a modern master what was said of Fergusson, who, in lithotomy, proceeded with such lightning speed and skill that someone advised a prospective visitor to his clinic to, 'look out sharp, for if you only wink you will miss the operation altogether.'

"Then, time was everything, and any procedure that would relieve the patient of his encumbrance by the shortest route was at the highest premium. Before the discovery of anesthesia, the surgeon had to be a man with a heart of steel in order to carry on his work of relief in an atmosphere reverberating with shrieks and yells, lurid with blood, and laden with the germs of disease and death. Then, indeed, he was best surgeon who could slash off an offending limb in the quickest time. Then, indeed, brilliancy consisted in speed, speed at any cost, and the price of speed was high. As late as the early nineteenth century, the death rate was enormous, full 95 per cent and over for the hip; 70 to 80 per cent for the thigh and so on. At present, by the modern methods of safety, it has fallen to an insignificant and negligible figure, in so far as the operative act is concerned. However, do not misunderstand me as depreciating the quality of speed when this is not a mere race for a record but is the legitimate outcome of dexterity, knowledge, system and method; the outcome of long experience and faithful practice in surgical exercises.

"But, I do not reckon speed as brilliancy when displayed chiefly, if not solely, for spectacular effect; when it is exhibited at the expense of security, and when appraised as skill it is rated above caution and judgment at the hazard of the patient's highest interests.

"Let us not forget that surgery, as it is known oday, was a *terra incognitto* to the most daring and skillful surgeons of scarcely half a century ago. Operations that are now a part of the daily routine of every well-established hospital would have seemed incredible to even such relatively modern masters as Mott, a Bigelow, or a Gross and other renowned contemporaries of this period, who would be astounded at the temerity and seeming foolhardiness of their successors.

"Professor Halsted, himself, has told us (Yale Address, 1904) that '1876, the year I first walked the wards of Bellevue Hospital, New York, the dawn of modern surgery in America had hardly begun.' The discovery of ether was not so old as to have obliterated all traces of the surgical rule, *Tuto, Cito et Jucunde,* but the rapid methol of operating was slowly giving place to safer, more conservative and deliberate procedures. In fact, it was not until a whole decade had elapsed, after the introduction of antiseptic surgery by Lister (1878 to 1888), that the changed conditions wrought by anesthesia, antiseptics and asepsis were actually realized by the mass of the profession. It was only then that the systematic invasion of the great body cavities began and when the pelvis, the abdomen, the thorax and the cranium gradually surrendered their contents and became amenable to the laws of surgery.

"With anesthesia and asepsis as the master keys, experimental surgery received a new impetus and the horizon of surgery rapidly expanded. Roentgen's discovery of the X-rays then came in 1895-96 to inaugurate a new epoch in surgery and, by illuminating the body, incredibly multiplied the indications for surgical intervention. The rays and the collaboration of the physiological, biochemical, bacteriological and pathological laboratories have all combined to so transform the entire face of surgery that it is no longer recognizable in the light of its ancient portraitures.

"The number of operations had not only multiplied but new operations have been added and are being devised which could not have been attempted in the pre-Listerian period and which were unthinkable and entirely beyond the conception of the older operators. Again, we should remember that many of the most difficult and dangerous operations, made possible through the advances of contemporary surgery, are still only made safe by the exercise of the greatest caution coupled with most consummate skill.

"Such undertakings consume time and, if speed is to be the criterion of brilliancy, the surgeon who performs these operations—no matter how successfully—can never be called 'brilliant.' And it is precisely this class of cases in which Professor Halsted was engaged!

"According to my understanding, brilliance in surgery lies more in the results of the surgeon's intervention than

in the immediate act. To my mind *he* is the most brilliant surgeon, who, in equality of circumstances, saves or prolongs the greatest number of lives.

"The brilliancy of the operator should not be appreciated by the time he consumes in the performance of an operation, but by the effect that follows its achievement; not in the mere recovery of the patient from the immediate operative act; but in the way in which he recuperates; in the length of time required for his recovery; in the period demanded to restore him to usefulness, and, above all, in the permanency of the cure which is accomplished.

"It is in this manner that I would rate and compare the brilliancy of surgeons, and it is from this viewpoint that Halsted is considered one of the most brilliant and greatest surgeons of his time. It is the sort of brilliancy at which he aimed and with which he sought to imbue his pupils through his teachings and example. It is the sort of brilliancy for which every coscientious surgeon —who places his patient's welfare and the good repute of his profession above the vanity of his own flesh, should strive."

Summary

In the preceding pages, an attempt has been made to pay tribute to William Stewart Halsted on the occasion of the Centennial year of his birth. Obviously this had been done at greater length and with greater skill by those surgeons throughout the world who knew and worked with Halsted. Reference has been made to his life, training and contributions. Probably he will be remembered not because he showed how such diseases as hernia and cancer of the breast can be cured, but because of his inauguration of a successful method of training outstanding surgeons, the residency system. He is the greatest surgical philosopher which this country has produced and alone among our surgeons deserves to be classed with Pasteur, Lister and Osler in the top rank of medical giants. This is not because of a forceful personality, political power, or oratorical splendor, attributes which usually do not last beyond the life of a scientist. Rather it is due to fidelity to principles, to his fertile investigations, his imagination and modest humanitarianism. With the passing of years his stature grows rather than diminishes.

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St. Luke's Hospital Clinico-Pathologic Conference

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Clinical Discussion by

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Clinical Record

THE PATIENT was a Mexican male child, five years old, who was well until five days before admission to the hospital. At that time, he developed high fever, headache, and vomiting that were associated with what seemed to be an infection of the upper respiratory tract. The spinal fluid contained 423 cells per ml. with 11 per cent polymorphonuclears and 89 per cent lymphocytes. The patient was then referred to St. Luke's Hospital. At the time of admission, he complained of pain in his legs and back.

The past history revealed that there had been a weight loss of ten pounds during the past six months. The patient had been treated for "worms" three months before the onset of the present illness. Shortly thereafter, he vomited thirty-eight "long worms," and since that time, he had vomited "worms" on three occasions. The patient was born in Texas and had come to Saginaw six months before the present illness. The family, including seven siblings, lived in a camp and drank well water. There was no known exposure to tuberculosis or contagious disease.

Physical examination revealed an alert and apprehensive child. The temperature was 102° F. The pupils responded slowly to light. There were no nystagmus or papilledema. The ears and nose were normal. The mouth revealed superficial erosion of the gums and the throat was hyperemic. The neck was stiff. Palpation disclosed no enlargement of lymph nodes. Respirations were labored and auscultation revealed moist râles over both posterior bases. The heart was not enlarged, there were no murmurs, and the pulse was of increased rate with normal sinus rhythm. The abdomen was soft. The external genitalia were normal. There was twitching of the upper and lower extremities on the left. The reflexes were hypoactive on the right and hyperactive on the left.

The urine was yellow, cloudy, acid, and of specific gravity 1.009 with uric acid crystals and occasional epithelial cells. Hematologic examination revealed 12.8 grams of hemoglobin per 100 cc. There were 4,000,000 erythrocytes and 9,700 leukocytes per cu. mm. Differential count of 100 cells revealed 72 segmented granulocytes, 2 band cells, 20 lymphocytes, 5 monocytes, and 1 eosinophil.

The temperature receded to 98.6° F. during the first three days. On the fourth day, the temperature rose sharply to 101.6° F. and returned to normal. On the fifth day, the temperature began an irregular but steadily progressive rise. The patient became comatose on the eighth hospital day. At that time, the spinal fluid examination revealed increased pressure, clear, colorless fluid, and 172 cells per ml. of which 105 were segmented granulocytes, and 72 were lymphocytes. The sugar was 50 and the total protein was 61 mg. per 100 cc. Smear and culture were negative. Two days later, a second spinal fluid examination revealed a pressure of 90 mm. H_2O, a normal Queckenstedt test, and 257 leukocytes per ml. with 192 segmented granulocytes and 65 lymphocytes. The sugar was 40 and the total protein was 74 mg. per 100 cc. Culture and smear of this specimen revealed Diplococcus pneumoniae. Chest x-ray on the eighth hospital day was stated to reveal no evidence of intrapulmonary disease. The tuberculin skin test, 1:1000 was negative after twenty-four and forty-eight hours.

Widespread muscle spasm developed, moist râles became audible throughout both lungs, and the temperature rose to 105°F. Penicillin and aureomycin were given. Widespread convulsions developed, the temperature rose to 107°F., and the patient died on the twelfth hospital day.

Discussion

DR. R. M. HEAVENRICH: There are several comments I should like to make about the history. We are told that this child of five years was well until five days before coming to the hospital, and that in the preceding six months he had lost ten pounds in weight. A weight loss of ten pounds in a child of this age represents a loss of 25 per cent of his expected weight and indicates that a serious illness was present much longer than five days before his admission. The vomiting of "long worms" probably represents ascariasis. Of course, any itinerant worker coming from the subtropic (and known to have one parasitic infestation), may also have others, such as amebiasis or hook worm disease. However, I suspect that these, if present, are incidental to the present illness.

On admission, this child complained of fever, headache, vomiting, and pain in his legs and back. These clearly indicate a lesion of the central nervous system and this is supported by the finding in the spinal fluid of some 400 cells of which almost 90 per cent were lymphocytes. The admitting officer must have strongly suspected acute poliomyelitis at this time and I presume that this was the first clinical impression. The important physical findings include sluggish pupillary response to light, stiff neck, and râles over the bases of both lungs. These further indicate central nervous system disease, and the râles may or may not be of importance. Given the history of only a brief upper respiratory infection, in the absence of cardiac enlargement or paralysis of the diaphragm and intercostal muscles, I shall assume that the râles bear no important relation to the intracranial lesion. Of greatest significance, however, is the absence of muscle weakness or paralysis. Most serious cases of poliomyelitis develop such changes by this time although they may be absent in the early part of the illness. There were also muscle twitching and hyperactive reflexes on the left side. These signs could be attributed to a focal cerebral lesion on the

right side. However, in the absence of other localizing signs, I shall assume that this is not a reliable indication of the site of the intracranial lesion.

The laboratory data are helpful in that there was only slight anemia with no leukocytosis, and no increase of immature myeloid leukocytes. The absence of leukocytosis does not necessarily exclude a bacterial infection as with overwhelming infection, the marrow production of leukocytes may be depressed. However, in these cases, there is usually an increase of band cells, and often, of nucleated erythrocytes. It is surprising that the eosinophil count is not higher, as we know that parasitic disease exists. It is also of importance to recall that widespread tuberculosis may be accompanied by only a slight leukocytosis. Anemia, however, is common. Two of the most significant features of this case are the negative tuberculin skin test and the negative x-ray of the chest. (Fig. 1). Either of these would be most helpful if they were positive. However, both may be negative in the presence of widespread tuberculosis. This applies particularly to the skin test, and indicates that the infection is recent and extensive. I have seen cases of miliary tuberculosis of the lungs in which the lesions were not demonstrable for some time by radiographic examination. If this proves to be a case of tuberculosis, it will be profitable to see the absence of these two features so clearly demonstrated.

Turning now to the hospital course, we see that this child manifested a steady rise in temperature, became comatose, and died after only twelve days in the hospital. During this time, the spinal fluid revealed a slight elevation of protein, a normal sugar content, absence of blood, and a leukocyte count that did not exceed 200 cells per cu. mm. In addition, the smear and culture were negative. This is consistent with viral or tuberculous infection. I shall assume that a pellicle in the spinal fluid did not form as we have no statement to that effect. Then on the sixth hospital day, the smear and culture both revealed pneumonocci. I must say that the clinical information is not, in my experience, suggestive of pneumococcus meningitis. There seems, also, to have been no response to penicillin as the disease was then sharply progresive with death six days later.

My differential diagnosis includes poliomyelitis, brain abscess, hemorrhagic encephalitis, tumor, tuberculous meningitis, and pneumococcic meningitis. There are several substantial points that stand against poliomyelitis. These include marked loss of weight during the previous six months, absence of muscle weakness or paralysis, and absence of respiratory involvement during the terminal course. Brain abscess is much more difficult to exclude. However, no source was demonstrated such as infection of the paranasal sinuses, the mastoid air cells, or the lungs. The patient gives no history of such a focal infection during the six months preceding the clinical onset of his illness. There was no papilledema. I do not think that the full story offers much support for this possibility although brain abscess, in my opinion, cannot be excluded. Viral infections of the brain accompanied by diffuse bleeding usually are manifested in part by spinal fluid that is consistently bloody, and on this basis I discard the diagnosis. Tumors of the central nervous system in children usually occur in the posterior fossa, enlarge slowly, and are accompanied by papilledema and by motor and proprioceptive disturbances without prominent signs of widespread meningeal inflammation. Thus,

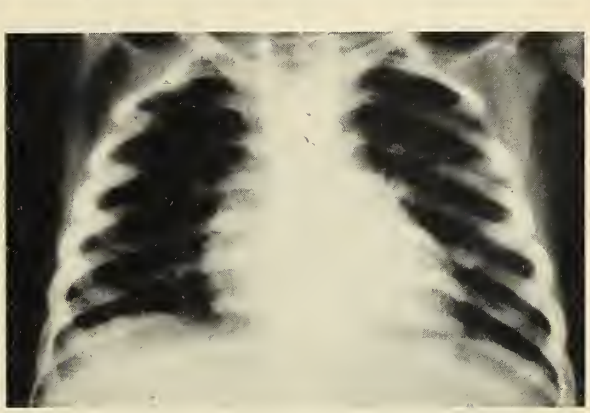


Fig. 1. The chest x-ray taken four days before death.

tumor seems most unlikely. Many features of this case are strongly suggestive of acute tuberculous meningitis. These include loss of weight, signs of extensive meningeal inflammation with relatively low spinal fluid cell count and normal sugar, and rapidly progressive course. The negative tuberculin skin test is not disconcerting. The normal chest x-ray, four days before death, is not unusual, but may occur with or without miliary tuberculosis. I would make miliary tuberculous meningitis my first clinical diagnosis were it not for the spinal fluid culture of a pneumococcus. Even with this objective finding, the spinal fluid disclosed normal sugar and low cell count, and the smear and culture were negative on the first examination. We are not certain of any preadmission treatment. It is possible that use of sulfa or antibiotics prior to hospitalization might have clouded the clinical picture that the original spinal fluid was sterile. In the hospital, however, pneumococci should have responded to penicillin. Nevertheless, since my clinical evaluation is subjective, and this finding of a pneumococcus in the spinal fluid is objective and cannot be disputed, I shall make my clinical diagnosis acute bacterial meningitis due to Diplococcus pneumoniae.

Dr. J. C. Smith: As a specialist in radiology, Dr. Caumartin, would you expect the chest x-ray, taken four days before death, to show miliary tubercles if this is a case of pulmonary and meningeal tuberculosis?

Dr. H. T. Caumartin: I would say that most cases of tuberculous meningitis in children, who have no other apparent focus of tuberculous disease, do have miliary tuberculosis of the lungs that is demonstrable by radiographic examination, particularly during the latter part of their illness. However, I must emphasize that such is by no means always the case, and I would say that in this patient, the negative chest x-ray does not exclude miliary tuberculosis of the lungs.

Dr. Heavenrich's Diagnoses

1. Acute pneumococcic meningitis.
2. Ascariasis of gastrointestinal tract.

Anatomic Diagnoses

1. Acute miliary tuberculous meningitis.
2. Caseous tuberculosis of hilar lymph node with extension into left main bronchus.
3. Miliary tuberculosis of lungs, pleura, diaphragm, spleen, kidneys, appendix, peritoneum, and mesenteric and pancreatic lymph nodes.
4. Ascariasis of ileum.



Fig. 2. Tuberculous fibrocaseous plaque deep in cerebral sulcus.

Dr. J. C. Smith: I want to acknowledge Dr. Heavenrich's courage in basing his diagnosis on the laboratory finding of pneumococci in the spinal fluid. There is no question but that he would have made the correct diagnosis had this organism not been found. On the second examination of spinal fluid, a Gram positive, bile soluble diplococcus was present in both smears and culture. The organism was not demonstrated in the meningeal exudate at autopsy and the morphologic aspects of the meninges were not typical of the exudative inflammation caused by pneumococci.

Autopsy examination revealed widespread miliary tuberculosis of the viscera and marked caseous enlargement of the lymph nodes at the hilum of the left lung. The caseous tuberculosis of one of these lymph nodes extended through the wall of the overlying main bronchus forming a large open ulcer. A moderately thick exudate was limited to the base of the brain. Sections revealed a cluster of tubercles enclosed within dense fibrous connective tissue deep within a cerebral sulcus. (Fig. 2). This fibro-cascous plaque revealed a central focus of caseous necrosis. The meninges over the base of the brain were covered with a thick layer of fibrin in which there were tubercles. Large numbers of acid-fast bacilli were identified in this exudate with the Ziehl-Neelsen stain. It is apparent that the fibrocaseous plaque was present for some time before the diffuse fibrinous meningeal inflammation developed.

This case represents a typical example of childhood tuberculosis in which the development of resistance was not sufficient to cope with the infection. It is probable that the pulmonary infection occurred some time before the onset of the present illness. This is indicated by the moderate fibrous reaction about the pulmonary tubercles. The bacilli in the lungs extended into veins and were carried through lymph channels to hilar nodes, one of which subsequently ulcerated into the left main bronchus. From the latter site, organisms were probably both expectorated and swallowed. Thus, widespread visceral tuberculosis developed by lymphatic, hematogenous, and bronchogenic dissemination. Also some time before the acute illness, the fibrocaseous plaque formed deep in a cerebral sulcus, probably as an isolated lesion. It is likely that the tubercle bacilli in the cerebral sulcus remained localized within the surrounding fibrous connective tissue until caseous necrosis developed. At that time, the organisms were released into the meninges in large numbers, acute diffuse fibrinous inflammation developed, and the patient entered the hospital with signs indicative of extensive meningeal inflammation. This explanation of pathogenesis is consistent with the concept of Rich,[1] who states that tubercle bacilli injected into the carotid artery of the rabbit do not incite diffuse meningeal inflammaion for the reason that the meninges function poorly as a filter of particulate pathogens. In contrast, however, the injection of tubercle bacilli directly into the subarachnoid space is followed by extensive and diffuse meningeal inflammation. This is supported by the finding in most cases of human tuberculous meningitis, of a fibrocaseous plaque or a cortical tuberculoma from which large numbers of tubercle bacilli gain entrance to the subarachnoid space.

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MEDICAL COSTS

Like all other costs, medical costs have risen in the last few years. Statistics presented by the United States Department of Labor for the third quarter of 1952 revealed that living costs had increased 90.8 per cent since 1935-39 while medical costs had increased only 65.5 per cent in the same time. Between 1935-39 and 1950 physicians' fees increased only 48 per cent while the average weekly wages increased 165 per cent. As a result, the average person works only 60 per cent as long now to pay for the same amount of medical services.—Walter B. Martin, President-Elect, AMA.

Detroit Physiological Society

Meeting of November 19, 1953

Brain Stem Connections of the Cervical Spinal Cord (N. Lat. Cervicalis)

F. A. Morin and J. Catalano, *Department of Anatomy, Wayne University College of Medicine, Detroit, Michigan*

Previous work from this laboratory indicated that some spinal pathways subserving superficial as well as deep sensory modalities relay in the lower part of the medulla oblongata, outside the dorsal column nuclei. A group of cells located laterally to the dorsal horn within the lateral funiculus is present in the lower part of the oblongata and throughout the first two cervical segments. This nucleus (N. lateralis cervicalis) is well developed in the cat, and is present also in the monkey.

It has been stated that N. lat. cervicalis sends its axons to the cerebellum, but using electrophysiological techniques we did not find sure evidence that this nucleus was involved in cerebellar connections. It seemed to us that further work was necessary for a better understanding of the functional significance of this structure, and the results of some preliminary work are here reported.

In a group of kittens and adult cats, extensive lesions of the cerebellum, including the lateral lobes and/or all the anterior lobe and cerebellar nuclei, did not induce retrograde cell changes in the N. lat. cervicalis. Conversely, lesions at midbrain level interrupting more or less completely the medial lemniscus were followed by chromatolysis of the N. lat. cervicalis opposite to the side of the lesion.

It appears that this nucleus projects mainly to the opposite thalamus and is not directly connected with the cerebellum, afferent impulses from the limbs could therefore reach the cerebellum without relaying in the nucleus lateralis cervicalis. This structure, on the other hand, seems more concerned with projections to the sensory areas of the cerebral cortex, as the results of electrophysiological experiments indicate.

Partial Purification of Viruses Using Ion Exchange Resins

Gerald L. Lo Grippo
Department of Laboratories, Henry Ford Hospital

A technique for the partial purification and concentration of poliomyelitis virus from central nervous system tissue using a strong base anion exchange resin (Amberlete XE-67) has been adapted to the extraction of Coxsackie virus excreted in human stools. Two major advantages of the procedure are: (a) its capacity for handling large volumes of crude infected material in a relatively short period of time, and (b) its relative simplicity in that it can be conducted at room temperature without the use of centrifuges. Coxsackie virus obtained by this procedure shows a high degree of infectivity for suckling mice.

It remains to be demonstrated that the Coxsackie virus extracted from the stools can be used as a complement fixing antigen in a serological test for an early presumptive diagnosis of Coxsackie infection. Confirmation of the disease, however, would still rest on the increase of antibody titer during convalescence. The principal value of this work is not so much its use in the early diagnosis of Coxsackie infection, but rather the fact that a new "tool" has been developed which can be utilized in the search for a practical laboratory diagnosis of virus diseases in general.

* * *

A third paper entitled, "The Chemistry of Muscular Contraction and Relaxation" by Laszlo Lorand, Wayne University College of Medicine, was also presented on this program.

Michigan State Medical Society Past Presidents 1922-1930



Throughout most of the 20's—almost until it happened in late 1929—Michigan and the rest of the nation had no inkling of what lay ahead: The Great Depression. It was a happy, prosperous time. Radio was the wonder of the day; first, the ear phones and crystal set, then the "super-heterodyne" powered by numerous tubes in an ornate cabinet. Michigan State College put the first educational radio station on the air in 1924. Five years later, the Michigan State Police came up with the first statewide police network. The Motor Era brought a great web of concrete highways to Michigan which introduced the gasoline tax in 1925 to meet the cost! The Straits of Mackinac ferry became part of the Highway Department, and the Detroit-Windsor Tunnel was opened. Trucks carried more and more of the freight between cities and into the villages. The Air Age was foreseen when a thundering Ford tri-motor provided the nation's first regularly scheduled air service between Detroit and Grand Rapids. The hectic but happy days of the 20's are good to remember; with 1930 a new experience began!

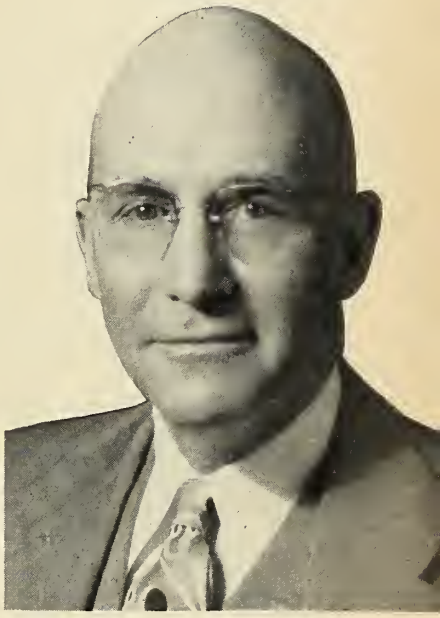
Here's an Opportunity

One of the developments of our time, particularly since the close of the Second World War, has been the large number of young graduates of foreign medical schools who are coming to our country for postgraduate training in our hospitals. Medicine is international in the true sense of the word. Physicians all over the world have a common language. Through these bright young men who are coming to us to benefit themselves and their own peoples, we, as doctors of medicine, can do much to dispel misunderstandings and suspicions that are often the basis for wars such as we have witnessed in our time. As a foundation for a friendly relationship, those of our profession who come in daily contact with these young doctors should forget the superman attitude, come down from the ivory towers and give them the attention and service necessary. They must not be treated as glorified orderlies. To accomplish the desired result requires a teaching program and extra time and effort on the part of all the members of our hospitals' staffs. Projects are already in effect bringing graduates of accredited foreign schools to certain of our hospitals for training, and more are planned.

Another means of promoting good will and understanding, which has received commendation from abroad, is the medical-surgical teams which have gone to other countries from the United States for teaching purposes under various auspices. Perhaps some of the gratitude expressed for their work is due to the recognized fact that we, as doctors, have no political axes to grind, only a desire to help others to help themselves.

Since the close of the Second World War, the United States has spent some forty billions of dollars to give aid to foreign countries. For our pains, we have earned some gratitude, and quite a bit of ill-will. A good many of us are beginning to realize that what most people who are in difficulty (elsewhere as well as in our own country) want is a helping hand, not a handout or a bagfull of dollars. We, as citizens and doctors of medicine, can help in bringing mutual understanding and peace to our country and the world by doing our part, small as it may seem, in the care and education of these postgraduate medical students from foreign lands who are in our hospitals today.

President's



Message

L. W. Hull

President, Michigan State Medical Society

Editorial

THE NATIONAL LEGISLATIVE PICTURE

THE SECOND session of the 83rd Congress is now meeting in Washington. Congressmen have been home for the holidays, and to talk with their constituents. Repeatedly, we have urged our members to call on these or make the acquaintance of any Congressmen whom they did not know personally. The destiny of the nation depends on the actions of our Senators and Representatives.

Thousands of new legislative acts will be introduced and acted upon. Most will be good and needful, some will not be to our liking. If we write to our friends in the Capitol, or telephone, our chances for favorable action will be much enhanced. Many probable acts will be to our distinct advantage in that we and our patients will be better able to carry on.

Social Security

A much-needed amendment to the Social Security Act is removal of the restrictions placed on older people who have earned old age benefits, but who for understandable reasons must continue to do some work, and add to the monthly stipend this old age "insurance" "guarantees" them. Doctors know that most old people who have worked all their lives cannot simply stop, and expect to keep their health. All restrictions should be removed from the old age insurance program. Those who can continue working or change their employment but still help earn their living will continue to pay into the public treasury their income taxes and their social security. By prohibiting earning more than a mere $75 per month, the government loses considerable in taxes, and industry loses the benefit of years of training. Everyone loses. This argument is not for the doctors, because we are not included in the social security benefits, but it does apply to nearly ten million persons.

Government and industry have forced early retirement on persons over sixty-five. Government, through its laws, denies benefits if the elderly person attempts to relieve his increasing needs by earning a stipend.

Our Tax Laws

Taxes must be raised to support the Government, but the spreading of the tax can be more justly made. Exemptions for dependents, a very proper arrangement, are really inadequate. No parent can support a child, and especially send him to school, for the $600.00 exemption. Insufficient ten years ago, today it should be at least $1,000.00. This modification would greatly benefit everyone, especially our struggling patients who are just making ends meet. A little assistance on the tax deduction would help.

We believe all just medical and health expenses should be deductible, instead of the calculated amount now recognized. People naturally hesitate to incure health service bills, through a certain feeling of thrift, but if the cost can be used in income tax adjustment, some of their hesitancy would end. This amendment to the tax laws would make for more bookkeeping in the doctor's office, but would benefit his patients.

Another item of income tax should interest practically all our members, those of us who have accumulated a few shares in the industry of the nation, and are entitled to receive dividends on their stock. Before industry can pay a dividend, the net earnings must pay an income tax starting at 52 per cent. Enough earnings must be retained in the business to make replacements, buy new equipment, and pay for unexpected emergencies. After those expenses, industry pays dividends. These dividends already have paid high income taxes, but every one who gets a dividend must also pay another tax on this same income. The tax of 52 per cent has already been paid. Then the least tax paid by the individual is 22.2 per cent and depending on his income bracket, may go as high as 92 per cent. The excess profits tax which took another huge bite is now repealed.

Tax Deferments for Annuities

The House Ways and Means Committee is considering legislation permitting the self-employed, including physicians, to defer, until retirement, income tax payments on a limited portion of earnings paid into restricted annuity plans. The legislation, popularly known as Jenkins-Keogh for

its two principal sponsors, was the subject of hearings last August, after Congress had adjourned. The proposal is certain to be reopened when the Ways and Means Committee takes up revisions of the income tax laws this session.

Constitutional Amendments

Joint Resolution No. 1 of this Congress, the so-called Bricker Amendment, is sure to attract attention. A hearing is supposed to have been held before this appears in print and possibly a vote taken. There is strong organized opposition to the amendment. When first proposed, it had a majority of the Senators' names attached, but some have withdrawn. When first proposed, Mr. Dulles, the present Secretary of State, was in favor of it, but after the assuming of his new duties, he has apparently changed his mind. His advancement in the treaty-making position may be significant. He is now the man who makes the treaties.

In brief, the "Bricker Amendment" does not restrict the treaty-making power of the President; it simply provides that any treaty or executive arrangement shall not by-pass the Constitution or the laws of the states or Federal Government as they may and do now. Such a proposed treaty would be subject to approval by action of the complete membership of both the Senate, and the House, not just the quorum actually sitting when action is taken.

Recently we received a long circular from a well-known propaganda source asking for contributions and active help in defeating the Bricker Amendment. The American Medical Association and the Michigan State Medical Society have both taken a firm stand in favor of the principle of this amendment. As the Constitution now stands, we could have the socialized medicine of a large part of the United Nations infiltrated into our system of life. We already have too much of it, and another large group is clamoring for medical benefits at the expense of the Federal Government. To protect our independent heritage in medicine, we need some such law as the Bricker Amendment.

GOLDEN GOOSE

GOLDEN GOOSE meetings are held throughout the state in an attempt to reach directly most of the doctors who make up the membership of the Michigan State Medical Society. Probably not more than one third of the doctors in the active practice of medicine can remember the condition of practice, the problems of financing the health care our patients needed before the days of the voluntary medical and hospital plans, the Blue Cross and Blue Shield. The only hope for relief in contemplation was State Medicine until the medical profession demonstrated to the insurance world that a method could be developed which would and did succeed. The two service groups were sponsored and created by our own trial and effort. Serious unfavorable usages have developed in the work of the Blue Cross, and incidentally of Blue Shield. A survey of 12,201 admissions has disclosed many cases of over-stay of patients in the hospital, or unnecessary laboratory services requested. Hospitalization of patients as Blue Cross patients, for services not covered by the contract, has occurred.

A few days ago, an attorney in active practice in one of our larger cities told the editor of a case he had in court. A patient attempted to collect unemployment insurance and industrial insurance benefits. An automobile injury received while on the way to work was ruled compensable. The patient had already been cared for by Blue Cross and Blue Shield. The court ruled the industrial insurance carriers should recompense the Blue Cross-Blue Shield, when an attorney sensing a gross injustice asked for that ruling. Blame for faulty usage of insurance benefits belongs to the demanding public, the negligent hospitals, and the accommodating doctor. The doctors of the state are the ones who can protect their own voluntary service plans if they will give patients whatever attention is needed—but not unauthorized service. We should read the insurance contract, and be familiar with its provisions. We have a limited contract to cover specific services. We once tried an all-inclusive policy and almost went bankrupt.

PEPTIC ULCER: AN OBSOLETE TERM

SEMANTICS—bad semantics—can be lethal! The expression "peptic ulcer" has been fatal to some patients, and can be fatal to more if it is not abandoned.

There was a time when duodenal ulcers and stomach ulcers seemed to have enough in common to justify an expression which would include them

both. "Peptic ulcer" served that purpose well enough in its day, but its day is past.

The expression "peptic ulcer" means "benign ulcerating lesion of the stomach or duodenum" —caused, according to Dorland's *American Illustrated Medical Dictionary,* by gastric juice. This is all right, for the duodenum. It is *not* all right—as a clinical or roentgenographic diagnosis—for the stomach. There it always includes an uncertain proportion, varying from 10 to 20 per cent according to the criteria used for diagnosis, of cases of ulcerating gastric carcinoma which cannot be identified as such until a surgical specimen is examined microscopically.

"Peptic ulcer" is therefore far too inclusive a term to be useful; it is, indeed, a dangerous term, since it seems to say more than it does. "What is good treatment for peptic ulcer?" is as foolish a question as "What is good treatment for a skin ulcer?" Yet it is asked, and debated, as if it were meaningful; and many a case of early and potentially curable gastric cancer goes on to an inoperable or incurable stage because his doctor is thinking in terms of "peptic ulcer."

Semantics—the meanings of words—is the business of editors; and it should be the business of editors to scotch this dangerous and obsolete expression wherever they encounter it. "Peptic ulcer" should be taboo in medical publications. Its elimination might save some lives.—Henry L. Arnald, Jr., M.D.

Editor's Note.—This editorial, prepared by the Editor of the *Hawaiian Medical Journal,* is published in an effort to clear expression of terms.

HOSPITAL EXPENSE CONTROL

GRACE HOSPITAL in Detroit, both branches, has adopted a new rule. Every order for medication or treatment must be rewritten by the physician in attendence every forty-eight hours. It was found that expensive drugs were ordered and a stop order forgotten. It has saved Michigan Hospital Service and the patients hundreds of dollars. The editor heard of a case where diathermy treatments were given for two weeks on an order, and only stopped when the patient asked why they were being continued.

URGE TESTS FOR PENICILLIN

The American Foundation for Allergic Diseases urged recently that doctors give patients allergy tests before administering penicillin.

Dr. Horace S. Baldwin, president of the foundation, reported that asthmatics, for example, were abnormally sensitive to penicillin injections. He estimated that there were 1,000,000 asthmatics in the United States and between six and seven million others affected with allergic ailments.

The doctor remarked that some day persons afflicted with asthma or severe allergy might wear tags warning against use of penicillin in case of accident.—*Philadelphia Medicine,* Jan. 2, 1954.

CONNECTICUT PHYSICIAN HONORED IN MICHIGAN

Mackinac Island, Michigan, was the scene recently of special ceremonies honoring one of Connecticut's most illustrious physicians, William Beaumont. It was in 1822 that Dr. Beaumont carried out his analytical studies on Alexis St. Martin which earned for him the epithet, "Father of Physiology." Michigan physicians and civic organizations have contributed funds for the erection of a shrine on Mackinac Island to be completed this year. Dr. Beaumont's office at Mackinac Island, as it appeared in 1822 when it was a trading post, also will be restored and become a part of the shrine.

William Beaumont was born and raised in Lebanon, Connecticut. In the early 20's, he was caught in the migratory wave sweeping the eastern seaboard, moved to Champlain, New York, and then to St. Albans, Vermont, in which latter place he studied medicine under Dr. Benjamin Chandler. His experiences in the U. S. Army gave him his opportunity to carry out his epoch-making experiments on the physiology of the stomach.

Connecticut has honored Dr. Beaumont in many less dramatic ways than Michigan.—*Connecticut State Medical Journal,* January, 1954.

PREDICTIONS

Since everybody else is making 1954 predictions, ranging from sublime optimism to depression-depth gloom, we thought you might be interested in a 1944 prediction we ran across, authored by economist Dr. Julius Hirsch. A decade ago, he said: "The best we can hope for, after the first postwar replenishment, is a national income between $100 million and $108 million, and an employment of 47 to 49 million, not including those in public works." (In 1953, we had 62 million employed, and a personal income of about $280 million.)

Thirty-four Years of Inspired Growth

Rehabilitation of the physically handicapped is the keystone in the program of the Michigan Society for Crippled Children and Adults, Inc., but the story behind the organization is itself a story of rehabilitation: the rehabilitation of an idea.

Organized first in 1920 as an inspiration of the Ann Arbor Rotary Club, the Society recorded ten years of accomplishments and growth before its program was forced to dwindle out in 1930 with the advent of the Great Depression. The comeback was started in 1934, when the Easter Seal was conceived—and what a come-back it was!

Determined to rebuild on a policy foundation that recognizes that crippled children work was everybody's problem, ten men gathered together, each man contributed one dollar, and the first Easter Seal sale was launched. These determined men literally started from nothing, since all records and property of the Society, which had been dormat for three years, had been lost in a fire.

That first Easter Seal sale in 1934 grossed a total of $22,283, sufficient to pay off the old indebtedness and put the Society on its way to a new era of accomplishments.

It is interesting to compare the results of the first Easter Seal sale with the return in 1953 when the people of Michigan contributed a gross of $368,205. With increasing financial strength came a proportionate increase in the program and activity of the organization.

Today there are sixty-five affiliated local, county, and area units in the state, and the Society's services extend to all of Michigan's eighty-three counties. Organization of the Society is two-fold in nature: (a) it is a statewide federation of affiliated member societies which render most of the direct case service; and (b) it is a functioning corporate body chartered under the laws of Michigan with a responsibility for work with the physically handicapped at the state level.

The state organization, which operated during 1953 on a $96,530 budget, recently completed one of its most active years. During this period, the Society gave the healthful, educational, therapeutic, and recreational advantages of camping experience to approximately 300 handicapped Michigan children. It conducted five cerebral palsy clinics accommodating some 160 children.

In addition, the Society financed special lectures during the summer school at Wayne University. For the fourth year, the two-week summer institute for cerebral palsied children and their parents at the Horace H. Rackham School of Special Education, Ypsilanti, was sponsored by the Society. Once again the Society helped finance the occupational therapy training program at Wayne University, a department which the organization helped establish and to which it has provided annual financial aid. Scholarships were granted to twenty worthy students.

To carry out its program, the Society produced in its own print shop almost one-and-a-half million separate printed pieces, and prepared and mailed seven million pieces of mimeographed copy. The Society staff traveled almost 200,000 miles last year to service the program and its handicapped recipients.

The schedule of work for the year 1954 suggests that the current program of the "Easter Seal Society" of Michigan will surpass in accomplishment that of 1953 and of any like period in the history of the health-giving organization.

PHYSICIAN SHORTAGE

Today we have a total of 220,104 physicians, the largest in our history. Of this number 159,120 are in active practice. All the rest, except for about 9,700 who are retired or not in practice, are serving American health needs in research, teaching, hospitals, and government service. On the basis of an estimated population of 160,000,000 in 1953, we now have one physician for every 727 persons, or about one physician actively engaged in the practice of medicine for every thousand persons.—Walter B. Martin, President-Elect, AMA.

New Type Program Unfolded at MSMS County Secretaries Conference



D. G. Pike, M.D.

A total of 217 attended the Annual County Secretaries-Public Relations Conference held in the Sheraton-Cadillac Hotel, Detroit, on January 31.

Under the chairmanship of L. Dell Henry, M.D., Ann Arbor, the County Secretaries Conference, in the morning, presented "What Would You Do?" skits. Nine dramatic presentations produced under the direction of Sam B. Shapiro, Chicago, portrayed practical problems faced by County Society Secretaries, as follows:

1. How Long Should a County Medical Society Secretary Serve?
2. Membership Problems
3. Orientation of New Members
4. Enforcement of Mediation
5. Utilization of Hospital and Medical Care Insurance
6. Importance of Office Secretary to M.D.
7. Itemized Bills
8. M.D. Participation in Civic Affairs
9. Solicitation of Ex-Members

Solutions to these problems were found in the storehouse of experience of all members present at the Conference. MSMS Secretary L. Fernald Foster, M.D., of Bay City, chairmanned these down-to-earth discussions of county society program accomplishment.

The "actors" in these nine skits were County Society Secretaries themselves. They included: R. H. Baker, M.D., Pontiac; H. G. Benjamin, M.D., Grand Rapids; E. W. Blanchard, M.D., Deckerville; R. V. Bucklin, M.D., Saginaw; J. R. Doty, M.D., Lapeer; L. Fernald Foster, M.D., Bay City; L. Dell Henry, M.D., Ann Arbor; J. L. Isbister, M.D., Lansing; W. S. Jones, Jr., M.D., Menominee; J. W. Lyons, M.D., Marquette; D. G. Pike, M.D., Traverse City; C. D. Selby, M.D., Port Huron; J. A. White, M.D., Big Rapids and Hugh W. Brenneman of the executive office.

The Public Relations Conference program, held during the afternoon included four discussions:

"Operation Periphery"—Edgar L. Harden, East Lansing, Dean of Continuing Education, Michigan State College

"Deskside PR"—John F. Conlin, M.D., Boston, Director, Medical Information and Education, Massachusetts Medical Society

"Do You Know Your Business?"—Gerald Dykstra, Ann Arbor, Professor of Business Law, University of Michigan.

"Here's the Score for '54"—C. Allen Payne, M.D., Grand Rapids, Chairman MSMS Public Relations Committee, and Hugh W. Brenneman, Lansing, MSMS Public Relations Counsel.

The consensus was that the 1954 County Secretaries-Public Relations Conference was the most interesting and most stimulating of any and all such Conferences sponsored by the Michigan State Medical Society.

D. G. Pike, M.D., of Traverse City, was elected Chairman of County Society Secretaries for the ensuing year.

Those present included:

County Secretaries.—J. E. Mahan, M.D., Allegan (Allegan); Harold Kessler, M.D., Alpena (Alpena); R. B. Pryor, M.D., Hastings (Barry); L. Fernald Foster, M.D., Bay City (Bay-Arenac-Iosco); Jack Campbell, M.D., Battle Creek (Calhoun); T. B. Mackie, M.D., Sault Ste. Marie (Chippewa-Mackinac); N. L. Lindquist, M.D., Escanaba (Delta-Schoolcraft); J. B. Rowe, M.D., Flint (Genesee); D. G. Pike, M.D., Traverse City (Grand Traverse-Leelanau-Benzie); C. L. Hoogerland, M.D., Alma (Gratiot-Isabella-Clare); W. O. Michel, M.D., Hillsdale (Hillsdale); K. L. Repola, M.D., Laurium (Houghton-Baraga-Keweenaw); J. L. Isbister, M.D., Lansing (Ingham); H. W. Porter, M.D., Jackson (Jackson); C. M. Schrier, M.D., Kalamazoo (Kalamazoo); H. G. Benjamin, M.D., Grand Rapids (Kent); J. R. Doty, M.D., Lapeer (Lapeer); R. M. Duffy, M.D., Pinckney (Livingston); J. W. Lyons, M.D., Marquette (Marquette-Alger); J. A. White, M.D., Big Rapids (Mecosta-Osceola-Lake); W. S. Jones, Jr., M.D., Menominee (Menominee); Emily R. Hautau, M.D., Midland (Midland); H. C. Tellman, M.D., Muskegon (Muskegon); L. F. Hayes, M.D., Grayling (North Central Counties); G. A. Drake, M.D., Petoskey (Northern Michigan); A. R. Young, M.D., Pontiac (Oakland); F. L. Groat, M.D., Grand Haven (Ottawa); R. V. Bucklin, M.D., Saginaw (Saginaw); E. W. Blanchard, M.D., Deckerville (Sanilac); C. D. Selby, M.D., Port Huron (St. Clair); H. R. Weisheit, M.D., Sturgis (St. Joseph); D. K. Morgan, M.D., South Haven (Van Buren); L. Dell Henry, M.D., Ann Arbor (Washtenaw); J. B. Blodgett, M.D., Detroit (Wayne).

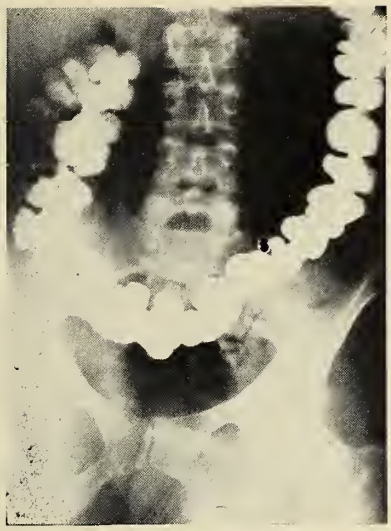
County Presidents.—W. R. Birk, M.D., Hastings (Barry); K. C. Miller, M.D., Saugatuck (Allegan); F. A. Barbour, M.D., Flint (Genesee); D. G. Trapp, M.D., Hillsdale (Hillsdale); R. J. Mason, M.D., Birmingham (Oakland); R. A. Johnson, M.D., Detroit (Wayne).

County Bulletin Editors.—D. A. Bowman, M.D., Bay City (Bay-Arenac-Iosco); and Philip W. Dorsey, M.D., Flint (Genesee).

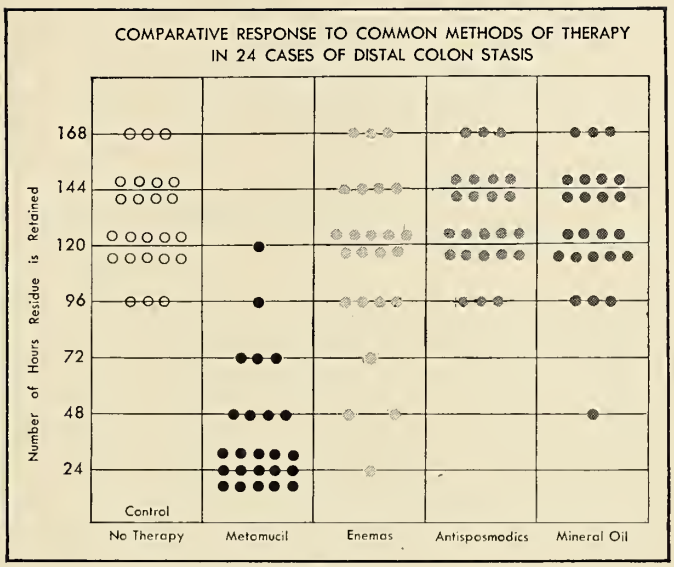
County Society Public Relations Chairmen.—A. B. Mitchell, M.D., Allegan (Allegan); O. J. Johnson, M.D., Bay City (Bay-Arenac-Iosco); H. C. Bodmer, M.D., Kalamazoo (Kalamazoo); E. L. Spoehr, M.D., Ferndale (Oakland); J. E. Manning, M.D., Saginaw (Saginaw).

MSMS Council.—R. H. Baker, M.D., Pontiac; R. S. Breakey, M.D., Lansing; F. H. Drummond, M.D., Kawkawlin; Wilfrid Haughey, M.D., Battle Creek; R. J. Hubbell, M.D., Kalamazoo; L. W. Hull, M.D., Detroit; J. D. Miller, M.D., Grand Rapids; B. T. Montgomery, M.D., Sault Ste. Marie; G. B. Saltonstall, M.D., Charlevoix; R. W. Shook, M.D., Kalamazoo; D. B. Wiley, M.D., Utica; H. B. Zemmer, M.D., Lapeer.

(Continued on Page 204)



Distal Colon Stasis



Management of Distal Colon Stasis with Metamucil®

The "irritable colon" resulting in distal colon stasis is a hard-to-manage by-product of many abdominal or stress conditions.

Roentgen evaluation of the commonly used methods to combat colonic stasis has shown the value of Metamucil because of its lack of irritation and its high degree of effectiveness* in this most prevalent type of stasis.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It produces smooth fecal bulk necessary to incite the normal peristaltic reflexes, without causing irritation, straining, impaction or interference with the digestion or absorption of vitamins.

The average adult dose is one teaspoonful of Metamucil powder in a glass of cool water, milk or juice, followed by an additional glass of fluid if indicated. This amount of fluid is essential for the production of "smoothage."

It is supplied in containers of 4, 8 and 16 ounces. Metamucil is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

SEARLE *Research in the Service of Medicine*

*Barowsky, H.: A Roentgenographic Evaluation of the Common Measures Employed in the Treatment of Colonic Stasis. Rev. Gastroenterol. *19*:154 (Feb.) 1952.

(Continued from Page 202)

Woman's Auxiliary Representatives.—Mrs. W. S. Stinson, Bay City; Mrs. A. F. Milford, Ypsilanti; Mrs. D. M. MacGregor, Flint.

Michigan State Medical Assistants Society Representatives.—Miss Charlotte Ash, Kalamazoo; Miss Hallie Cummins, Caro; Miss Lorine R. Nuechterlein, Saginaw; Mrs. Elizabeth E. Peck, Detroit; Miss Marlouise Redman, Detroit; Miss Margaret Schultz, Detroit.

Executive Secretaries of County Medical Societies.—Mrs. Sara M. Warren, Flint; Miss Else Kolhede, Detroit; Carl G. King, Saginaw; J. O. Devereaux, Pontiac. Pontiac.

MSMS Public Relations Committee.—S. E. Andrews, M.D., Kalamazoo; H. G. Bacon, M.D., Scottville; W. E. Barstow, M.D., St. Louis; F. C. Bracc, M.D., Grand Rapids; M. W. Buckborough, M.D., South Haven; R. A. Frary, M.D., Monroe; A. B. Gwinn, M.D., Hastings; W. J. Herrington, M.D., Bad Axe; E. C. Long, M.D., Detroit; G. E. Millard, M.D., Detroit; E. S. Oldham, M.D., Breckenridge; C. Allen Payne, M.D., Grand Rapids; A. C. Pfeifer, M.D., Mt. Morris; W. Z. Rundles, M.D., Flint; C. K. Stroup, M.D., Flint; C. L. Weston, M.D., Owosso; V. M. Zerbi, M.D., Ypsilanti.

Past Presidents.—Otto O. Beck, M.D., Birmingham; L. J. Hirschman, M.D., Traverse City, and J. Milton Robb, M.D., Detroit.

Guests.—Mrs. A. D. Aldrich, Houghton; Henry Alexander, Detroit; Mrs. S. E. Andrews, Kalamazoo; G. E. Anthony, M.D., Flint; Mrs. Rose B. Anthony, Flint; P. S. Barker, M.D., Ann Arbor; G. H. Bauer, M.D., Ann Arbor; Mrs. I. C. Berlien, Detroit; B. A. Breakey, M.D., and Mrs. Breakey, Ann Arbor; Mrs. R. S. Breakey, Lansing; J. W. Bryce, M.D., Center Line; Mrs. F. G. Bucsser, Detroit; Wm. H. Byrne, Detroit; J. W. Castellucci, Detroit; Verne Collett, Detroit; J. R. Foster, Detroit; Mrs. R. A. Frary, Monroe; A. K. Gillies, Toronto, Ontario; L. G. Goodrich, Detroit; Wm. F. Grimshaw, Detroit; Mrs. Frank Groat, Grand Haven. J. Joseph Herbert, Manistique; Mrs. R. J. Hubbell, Kalamazoo; M. J. Ittner, M.D., Midland; Mrs. O. J. Johnson, Bay City; L. U. Lang, M.D., Kitchener, Ontario; Mrs. Wm. MacKersie, Detroit; Mrs. J. E. Mahan, Allegan; Neal L. McCue, Detroit; Mrs. Lee Millard, Detroit; Mrs. K. C. Miller, Saugatuck; Mrs. A. B. Mitchell, Allegan; Anton Patti, Jr., Detroit; L. A. Potter, Lansing; V. P. Russell, M.D., Royal Oak; Mrs. Edith B. Russell, Pleasant Ridge; A. R. Schaedel, Detroit; Helen Schick, Detroit; Mrs. C. M. Schrier, Kalamazoo; Mrs. M. L. Shadley, Pontiac; R. F. Staudacher, Chicago, Illinois; W. S. Stinson, M.D., Bay City; Miss Carol Towner, Chicago, Illinois; Warren F. Tryloff, Lansing; E. G. Upjohn, M.D., Kalamazoo; Mrs. Ruth C. Weston, Owosso; E. H. Wiard, Lansing.

Thanks are extended to all of the participants in the program and Miss Helen Schulte, Mr. A. D. Brewer, Mr. S. A. Campbell, Mr. Dwight Jarrell of the executive office.

Recent M.D. Locations in Michigan

Aided by the M. D. Placement Bureau

July, 1953

Andrew V. Bedo, M.D., Mt. Pleasant (from New York)
Joseph E. Cooper, M.D., Bangor (from Military Service)
Malcolm Delaney, M.D., Farmington (from Canada)
Thomas P. Hayes, M.D., St. Joseph (from Niles)
George B. Loan, M.D., Monroe (from Toledo)
Thomas C. McInerney, M.D., Royal Oak (——)
Stuart Middleton, M.D., Monroe (from Flint)
Robert E. Modders, M.D., Frankenmuth (——)
Z. Edin Taheri, M.D., Bay City (from Detroit)
Arno W. Weiss, M.D., Saginaw (from Bad Axe)
John W. Wood, M.D., Mt. Pleasant (from Military Service)

August, 1953

Earl M. Beardsley, M.D., Milan (from Maryland)
E. F. Brasier, M.D., Mayville (from Munising)
Jack H. Buck, M.D., Ionia (from Detroit)
Paul W. Butterfield, M.D., Alpena (from Vermont)
Malcolm L. Crump, M.D., Rogers City (from Detroit)
Peter J. DeVries, M.D., Grand Haven (from Battle Creek)
R. E. Gibson, M.D., Newberry (reopened) (——)
John Halick, M.D., Greenville (from Illinois)
Carroll L. Jensen, M.D., St. Joseph (from California)
Pieratt Johnson, M.D., Alma (from Grand Rapids)
Finette M. Marzolf, M.D., Lansing (from Detroit)
Richard Persons, M.D., Union City (from Greenville)
F. L. Pierce, M.D., Dowagiac (from Detroit)

September, 1953

Burdette M. Berens, M.D., Lansing (from Residency)
J. F. Cordes, M.D., Lansing (from Ann Arbor)
Emile Etienne, M.D., Luna Pier (from Cincinnati)
A. G. Goude, M.D., Hopkins (from Military Service)
Blake Kutsche, W. F., M.D., Oscoda (from Saginaw)
Robert M. Michels, M.D., Flushing (reopened) (from Military Service)

October, 1953

Donald A. Cairns, M.D., Mason (from Lansing)
John Heneveld, M.D., retires (from Kalamazoo)
Robert G. Heneveld, M.D., Muskegon Heights (from Muskegon)
Robert Todd, M.D., Iowa, town unknown (from Croswell)

—Report of M.D. Placement Bureau, Michigan Health Council, 706 N. Washington Avenue, Lansing 6, Michigan.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

STEPPED-UP TB CONTROL PROGRAM PROPOSED

Plans for an intensified tuberculosis control program that have been in preparation in the department for several months await only the increased budgetary support necessary before being put into operation.

Designed to meet the challenge of a persistently high incidence of reported cases of the disease in the face of a steadily falling death rate, the proposed program provides for increased facilities and activities for early finding of cases through (1) better epidemiological handling of cases and contacts, (2) the maintenance of a central register and (3) promotion of various forms of x-ray surveys including a pilot program of subsidizing general hospital admission x-rays. It provides also for prompt and adequate hospital care for all persons having the disease and for effective medical rehabilitation services.

From the standpoint of economy in government alone, the need for an all-out campaign of tuberculosis control is urgent. For the current year, it is estimated that state and county governments of Michigan will be required to spend approximately 19 million dollars for the treatment of persons having tuberculosis, with 85 per cent of those admitted to sanatoriums already in advanced stages of the disease.

RECOMMENDATION ON POLIO VACCINE TESTING

A number of representative physicians were invited by the Commissioner to meet with him to consider the general subject of poliomyelitis vaccination, with particular attention to field testing studies.

The group approved in principle a field testing study of a killed tissue culture poliomyelitis virus vaccine (Salk) containing the three types of poliomyelitis virus to see whether or not it is effective in preventing paralytic poliomyelitis, provided that the National Institutes of Health of the United States Public Health Service certify in writing as to the safety of each lot of the vaccine to be used.

This statement will be presented to the State Council of Health at its meeting in January and also to the Commissioner's Advisory Committee of Local Health Officers before a final department policy is formulated.

VITAL STATISTICS REPORT AVAILABLE

The annual statistical report of the Michigan Department of Health for the calendar year 1951, under the title, "Michigan Health Statistics . . . 1951" is now available for anyone interested. The report contains, in addition to the usual tables, effective graphic presentation of significant 1951 data and of "Michigan's Changing Health Picture . . . 1940-1951."

COMMISSIONER'S CONFERENCE OF HEALTH OFFICERS

The Commissoner's annual three-day conference with local health officers, February 3 to 5, will continue to operate under four working committees, with the program planned and carried on by the health officers themselves. Major problems to be considered include accident prevention, school health services, chronic disease control and health problems associated with migrant labor.

HOSPITAL RULES AND MINIMUM STANDARDS APPROVED

The combined new and revised rules and minimum standards for all Michigan hospitals have been approved by the State Council of Health and by the Attorney General.

RABIES CENTERED IN DETROIT METROPOLITAN AREA

Of the 155 cases of rabies in animals reported in Michigan in 1953, a total of 114 were in the northern part of the Detroit Metropolitan Area. As usual, stray and, therefore, unvaccinated dogs are considered the major problem.

FOR BETTER SCHOOL HEALTH SERVICES

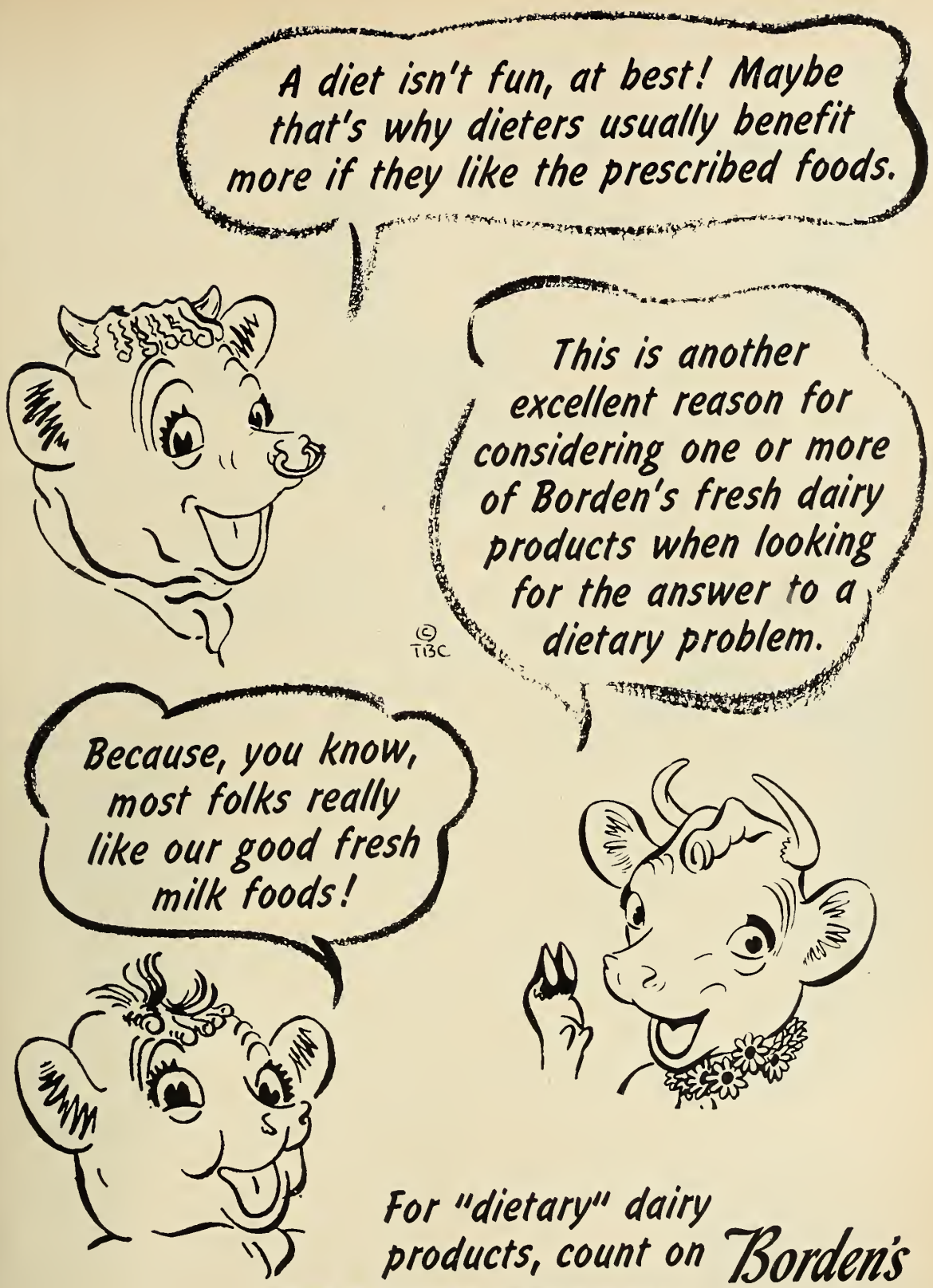
Better co-ordination of the school health services given by four state agencies should result from a newly inaugurated series of Interagency Staff Meetings on School Health. Participating in the new program are the department of health, the department of public instruction, the department of mental health and the state board of alcoholism. At the first meeting of the group, mental health of the school age child was the subject discussed, with the department of mental health taking leadership and the other departments reporting the contributions they are making to that phase of school child health.

"IF YOUR CHILD HAS A HEARING LOSS"

A new folder issued by the department, "If Your Child Has a Hearing Loss," is intended for parents of children with hearing losses or those suspected of having hearing losses. Copies are available upon request to local health departments or to the Michigan Department of Health.

DIPHTHERIA IS STILL WITH US

Only twelve cases of diphtheria had been reported in the state during 1953 until five cases were reported from one school in a northwestern county and two from a town in a neighboring county during the last two weeks in December.



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In Memoriam

GEORGE H. CAMPAU, M.D., of Detroit, died November 2, 1953, at the age of sixty.

Dr. Campau was a member of a pioneer Detroit family which has been prominent in that city since the days of Cadillac, its founder.

A graduate of Wayne Medical School, Dr. Campau was on the staff at Providence Hospital. He was a veteran of World War I.

Dr. Campau is survived by his wife, Ruperta; a son, George H. Campau, Jr., and two daughters, Mrs. Joseph Maher and Jean Campau.

CLARENCE A. CHRISTIANSON, M.D., of Dearborn, died November 22, 1953, at the age of sixty-one. He was founder, president and chief of staff of Dearborn Medical Center Hospital.

Dr. Christianson was born in St. Joseph, Michigan, but had lived in Dearborn for forty-seven years. He received both his B.S. and M.D. degrees from the University of Michigan.

For many years, he served as Health Officer for the community in which he practiced.

During World War I, Dr. Christianson served overseas with the United States Army and was discharged with the rank of Captain.

He was active in civic affairs and was a director of the Bank of Dearborn. Dr. Christianson was past president of the Dearborn Rotary Club and a member of the Veterans of Foreign Wars.

He is survived by his wife, Myrtle; a son, Clarence A., Jr.; a daughter, Mrs. James V. White of Bay City, and a brother, Harry.

EDWARD O. LEAHY, M.D., of Jackson, died November 21, 1953, at the age of fifty-eight.

Dr. Leahy was born in Liberty Center, Ohio, and was graduated from high school in that city. Following completion of undergraduate study at Defiance College, he entered the University of Michigan Medical School, from which he was graduated in 1920.

Dr. Leahy interned at Foote Hospital, Jackson, carried on a general practice for two years in Grass Lake, and held a two-year residency at Manhattan Eye and Ear Hospital, before entering specialized practice in Jackson in 1924.

He was a member of the Detroit Otological Society.

Dr. Leahy is survived by his widow, Louine; two sons, Edward, of St. Louis, and Joseph, who is serving in the Air Force in England, and a daughter, Mrs. R. E. Lambert, of Ann Arbor.

FREDERICK W. MC AFEE, M.D., of Detroit, died November 28, 1953, at the age of seventy-five.

Dr. McAfee had resided in Detroit for forty-nine years, starting practice there after his graduation from the University of Michigan Medical School in 1904. He was a native of Norwich, Ontario.

During World War I, he served as head of a medical detachment in France. He was past president of the Michigan Chapter of the 42nd Rainbow Division.

At the time of his death, he was with the City Physician's Office in Detroit.

He is survived by his wife, Mary Jane, and a daughter, Mrs. Eva May Ness.

H. T. NEZWORSKI, M.D., of Ironwood, was killed December 2, 1953, when his automobile skidded on an icy road in Ontonagon County and hit a tree. He was forty-four years old.

Dr. Nezworski was born in Ironwood, where he completed his high school education. Both his undergraduate work and his medical study were at Marquette University, from which he received his M.D. degree in 1933. He had practiced in Ironwood since his internship, except for seven years on the medical staff of the Castile Mining Company at Ramsay.

Dr. Nezworski is survived by his wife, Dagny, and two children, Kathleen Ann and Henry Thomas, Jr. Also surviving are his mother, four brothers, and a sister. One brother, Louis, is a doctor of medicine in Eau Claire, Wisconsin.

REU S. TAYLOR, M.D., Detroit, died November 22, 1953, at the age of seventy-seven.

Born in New Hudson, Michigan, Dr. Taylor had practiced medicine in Detroit for forty-five years.

Dr. Taylor was graduated in 1906 from the Detroit College of Medicine. He was on the staff of Booth Hospital.

Surviving Dr. Taylor are his wife, Esther, and four sons: Norman Taylor, D.D.S., of Montague; Wendell Taylor, M.D., of Bath; Spencer Taylor, and Sherman Taylor.

ALVIN THOMPSON, M.D., who practiced urology in Flint for thirty-one years, died at his home, October 22, 1953. He was seventy-two years old.

Dr. Thompson was born in Racine, Wisconsin. He received his M.D. degree in 1912 from the University of Illinois Medical School and taught at Rush Medical College and Northwestern Dental School after his graduation. He moved to Flint in 1922 and was recognized as that city's first physician specializing in urology. He served on the staffs of all three major hospitals in Flint.

Dr. Thompson was president of the Genesee County Medical Society in 1936-37, and in 1945 was president of the Flint Academy of Surgery. He was a member of the American College of Surgeons and a Diplomate of the National Board of Urology. Before moving to Flint, he was secretary-treasurer of the Chicago Urological Society.

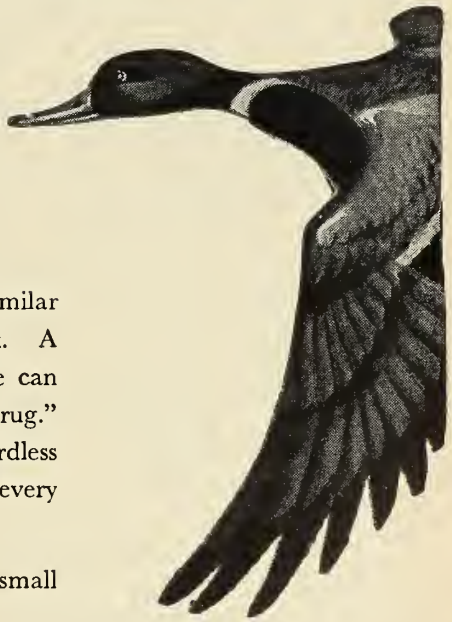
He is survived by his wife, Florence; a daughter, Mrs. Theodore Mattson of El Paso, Texas; a sister, and three grandchildren.





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MICHIGAN AUTHORS

Alexander Blain, III, M.D., Nester A. Flores, M.D., of Detroit, and **Francis Gerbasi, M.D.**, of Ann Arbor, are authors of a paper entitled "Present Status of Peripheral Neurectomy for Pain in Obliterative Arterial Disease," published in *Journal of the American Geriatrics Society,* September, 1953.

James H. Maxwell, M.D., Robert W. Buxton, M.D., by inivitation, and **A. James French, M.D.**, by invitation, of Ann Arbor, are authors of an article entitled "Surgical Treatment of Parotid Gland Tumors" presented at the Fifty-seventh Annual Session of the American Academy of Ophthalmology and Otolaryngology, October, 1952, in Chicago, and published in *Transactions of the American Academy of Ophthalmology and Otolaryngology* for September-October, 1953.

Carey P. McCord, M.D., Ann Arbor, is the author of the third of a series of articles entitled "Lead and Lead Poisoning in Early America," published in *Industrial Medicine and Surgery,* December, 1953.

Rose H. Parker, M.D., Edgar A. Kahn, M.D., and **Vivian Iob, Ph.D.**, Ann Arbor, are authors of an article entitled "Thoracic Duct Ligation During Supradiaphragmatic Splanchnic Section: Effect on Hypertension and Liquid Transport" published in the *University of Michigan Medical Bulletin,* November, 1953.

Robert C. Bassett, M.D., of Ann Arbor, is the author of an article entitled "Some Developmental Aspects of Vascular Lesions in the Central Nervous System" published in *University of Michigan Medical Bulletin,* November, 1953.

J. F. Palmer, A.B., A. L. Drew, M.D., and **M. B. Chenoweth, M.D.**, Ann Arbor, are authors of an article entitled "Tissue Copper Determinations in a Case of Hepatolenticular Degeneration Treated with BAL (Dimercaprol)," published in *University of Michigan Medical Bulletin,* November, 1953.

J. S. De Tar, M.D., Milan, is the author of an article entitled "General Practice in a Small Town Area" published in the *Journal of the Student American Medical Association,* December, 1953.

H. E. Pedersen, M.D., and **A. J. Day, M.D.**, Detroit, are authors of an original article on "Dupuytren's Disease of the Foot" which appeared in JAMA, January 2, 1954.

Henry H. Black, Battle Creek, is the author of an article entitled "Business Management of Medical Practice," published in the *Pennsylvania Medical Journal,* December, 1953.

John M. Hammer, M.D., F.A.C.S., F.I.C.S., and **Patrick H. Seay, Ph.D.**, Kalamazoo, with **Edward J. Hill, M.D., F.A.C.S.**, and **Frank Prust, M.D.**, Detroit, are the authors of an article entitled "Surgical Uses of Viable Intestinal Segments" published in the *Journal of the International College of Surgeons,* November, 1953.

Geza Schinagel, M.D., F.A.C.S., F.I.C.S., Detroit, is the author of an article entitled "Incidental Urogenital Pathologic Conditions Associated with Traumatic Urogenital Emergencies," published in the *Journal of the International College of Surgeons,* November, 1953.

S. E. Gould, M.D., H. J. Gomberg, Ph.D., and **F. H. Bethell, M.D.**, from the Atomic Energy Commission Laboratory on Biological Effects of Irradiation, the Michigan Memorial-Phoenix Project, and the Department of Pathology, University of Michigan, Ann Arbor; and Departments of Pathology, Wayne County General Hospital, Eloise, and Wayne University College of Medicine, Detroit, are authors of an article entitled "Prevention of Trichinosis by Gamma Irradiation of Pork as a Public Halth Measure," published in *American Journal of Public Health* and the *Nation's Health,* December, 1953.

Robert W. Buxton, M.D., Ann Arbor, is the author of an article entitled "Squamous Cell Anal Carcinoma" published in AMA *Archives of Surgery,* December, 1953.

Jere M. Bauer, M.D., Ann Arbor, and **Jerome W. Conn, M.D.**, Ann Arbor, are authors of an article entitled "Werner's Syndrome—A Study of Adrenocortical and Hepatic Steroidal Metabolism" published in the *Texas State Journal of Medicine,* December, 1953.

R. C. Moehlig, M.D., and' **A. L. Steinbaugh, M.D.**, Detroit, are authors of an original article on "Cortisone Inference with Calcium Therapy in Hypoparathyroidism" which appeared in JAMA, January 2, 1954.

Maurice H. Seevers, M.D., Ph.D., Ann Arbor, is the author of an article entitled "Perspective Versus Caprice in Evaluating Toxicity of Chemicals in Man," published in *The Journal of the American Medical Association,* December 12, 1953.

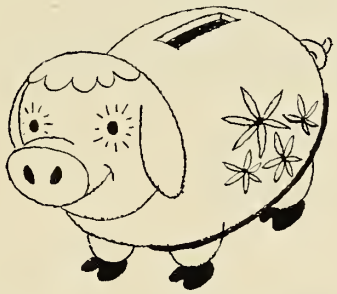
(Continued on Page 212)

FOR ALL INFANT FEEDING

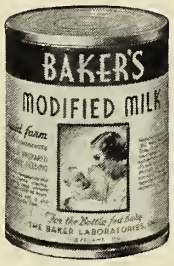
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(Continued from Page 210)

Garner M. Byington, M.D., San Jose, California (formerly of Detroit, Michigan), is the author of an original article on "Educational Program for Nursing Supervisors in Maternity Hospitals: The Physician's Standpoint" which appeared in the *American Journal of Public Health,* September, 1953.

* * *

Michigan Medical Service reports that during the year 1952 there were 646,797 Service reports received and processed. That is there were 646,797 actual services rendered to contract holders. During the year 1953 there was a 23 per cent increase or 794,644 services rendered. There was only a 14 per cent increase in numbers of subscribers. Utilization of the plan was increased by the difference, or 9 per cent. This is an item our membership, both doctors and subscribers, must consider, as it definitely indicates a necessary increase in rates or decrease in services. This work is not done for nothing. It is the subscriber who pays the bill.

In 1953, Michigan Medical Service paid to the doctors for services in the Medical and Surgical plans $23,173,545.06 and for VA $850,097.75, or a grand total of $24,023,442.81. This compares with the year 1952 $21,439,541.10: $974,143.00 and a grand total of $22,413,648.10.

Seventy-eight per cent of all anesthetics given in the State of Michigan and paid for by the Service plans are given by lay anesthetists, and paid through Michigan Hospital Service, the other twenty-two per cent are given by doctors and are paid through Michigan Medical Service.

* * *

The fourteenth annual Parent Institute of the Nursing School, Michigan School of the Deaf, will be held in Flint, March 28 through April 3, 1954. It is planned for hearing-impaired preschool children and their parents.

The program for the parents, consisting of classes, observations, consultations, scheduled tours and lectures, has been planned to assist parents with their child during the preschool years. There is much parents can do to train their child during these early years and help him to develop habits and patterns which will be important to him throughout his life.

The program for the children is one of attendance at a nursery school to help start them on the road to new experiences in learning.

Attendance is open to any mother or father (or both) of this State and their deaf or hard-of-hearing preschool child. Educators, rehabilitation workers, and other interested individuals are welcome to attend any or all meetings listed in the program. There will be no charge.

* * *

The Institute of Industrial Health and the School of Public Health at the University of Michigan on October 21, 1953, sponsored a conference for physicians, attorneys

(Continued on Page 214)



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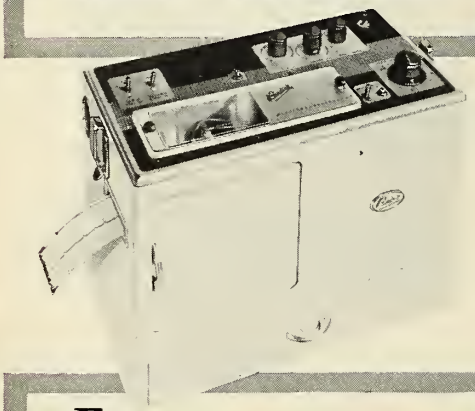
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(Continued from Page 212)

and industrial hygienists on expert and technical testimony.

At the planning stage of this conference, the enterprise was regarded as unlikely to attract any wide concern or any large audience. To the contrary, at the actual time of this conference an overflow crowd flatteringly exceeded all facilities. It becomes strikingly apparent that here is a topic of outstanding appeal both to physicians and attorneys and thus invites consideration in future planning of scientific programs by medical and legal organizations.

Outstanding in this conference were the following presentations and their speakers: Mr. Buell A. Doelle: Attorneys, Technical Witnesses and The Courts (The Keynote Address); Dr. Edward D. Spalding: The Physician's Obligations to the Courts; Mr. T. Donald Wade: Preparation of the Technical Witness Prior to Court Appearance; Dr. Theo. J. Curphey: The Medical Preparation of a Medical-Legal Case; Dr. Eli Sherman Jones: The Use of Scientific Records and Exhibits in the Court Room.

The evening session of this one-day conference was a demonstration of the poorly equipped technical witness and his type of damaging testimony versus the highly skilled expert witness making distinct contribution to the court activity and thus serving the judge or jury in the reaching of a just decision.

Manuscripts from the entire program are in process of publication and are available through the School of Public Health at the University of Michigan.

While the unexpected display of interest in the need for and the techniques of expert testimony may impose upon the University of Michigan groups to repeat this program, it appears that many other medical and legal organizations on a nation-wide basis may do well to make available to those concerned similar programs.

(EDITOR'S NOTE.—Two of these papers are being presented in this number of THE JOURNAL, the one by Dr. Spalding having been received just two days before his murder.)

* * *

The December 4 issue of the Armed Forces newspaper, *Stars and Stripes,* contained an interesting story from Bonn which said that Germany has an army of 30,000 jobless or partially jobless doctors.

"There are 4,543 West German doctors unemployed or dependent on odd jobs outside their profession," the story said, adding: "Doctors are working as construction laborers, jazz musicians and circus roustabouts.

"An additional 18,000 German doctors have all but deserted the medical field for other careers. . . . Finally there are 8,000 postgraduate medical students working without pay as interns.

"Why don't these doctors try their luck and take the risk of starting the life of a private practitioner?

"The answer is the traditional German system of public health insurance, a system which has existed since Bismarck. Today, four out of five families are insured under the system."

The newspaper explained in great detail the inadequacies of the system as it exists today.

(Continued on Page 216)

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(Continued from Page 214)

East Germany, ironically, is critically short of doctors, there being only one doctor for every 2,000 inhabitants. Further, the newspaper said, food shortages and long working hours decreed by the East-zone Communist regime have brought a serious increase in illness.—From AMA Secretary's Letter, January 8, 1954.

* * *

The American Hospital Association polled members of its House of Delegates recently and found little evidence to show that there would be a leveling-off of hospital costs during 1954. The administrators reported that the major factors which they believed would contribute to a continuation of increased operating costs were payrolls and costs of supplies. A number of those who responded said that the gradual reduction in hospitals from a 48-hour and a 44-hour work week to a 40-hour schedule would be reflected in higher operational costs.

* * *

The American Cancer Society, at its recent annual dinner meeting, adopted a resolution expressing appreciation for the television program "The Fight Against Cancer," one of the programs in the March of Medicine series sponsored jointly by Smith, Kline & French Laboratories, of Philadelphia, and the American Medical Association, over the NBC-TV network.

* * *

The Foundation of the American Society of Plastic and Reconstructive Surgery, Inc., announces its Fifth Annual Scholarship Contest with two main prizes offered, each consisting of a three months' plastic surgery scholarship with full maintenance in a number of selected leading services in the United States and abroad. The contest is restricted to surgeons in practice no longer than five years and to residents in training.

For information on this essay contest, write Chairman Jacques W. Maliniac, M.D., 30 Central Park South, New York, N. Y.

* * *

The Sixth Annual Convention of the International Academy of Proctology will be held at the Palmer House, Chicago, April 8-11, inclusive. For program, write the Academy at 43-55 Kissena Boulevard, Flushing, New York. The Academy also announces its Annual Cash Prize and Certificate of Merit Award contest ($100).

* * *

Wm. J. Stapleton, Jr., M.D., Detroit, Michigan's Foremost Family Physician, will be honor guest at the 1954 Annual Meeting of the Wayne University Medical School Alumni. The dinner honoring Dr. Stapleton will be held at the Fort Shelby Hotel, Tuesday, May 4, 1954.

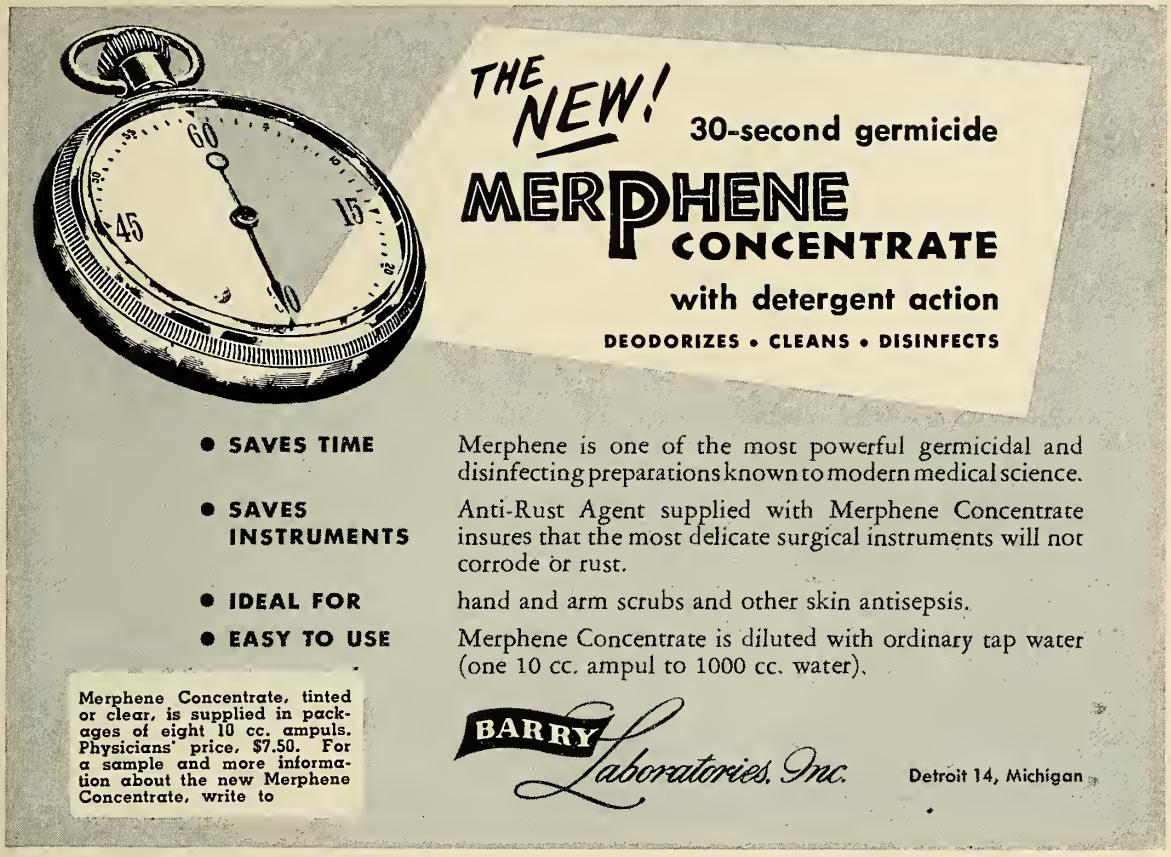
* * *

The American Geriatrics Society will hold its 11th Annual Meeting at the Hotel Fairmont, San Francisco, June 17-19 (immediately preceding the AMA Annual Session). For programs and full information, write Laurance W. Kinsell, M.D., 2701 Fourteenth Avenue, Oakland 6, California.

* * *

The Upper Peninsula Medical Society will hold its





59th Annual Convention in Menominee, June 18-19, 1954. Speakers on the program include such luminaries as:

Allan Barnes, M.D. (Obstetrics), Cleveland; Harry Beckman, M.D. (Therapeutics), Milwaukee; M. R. Burnell, M.D. (Internist), Flint; Richard B. Capps, M.D. (Internist), Chicago; James Conway, M.D. (Pediatrics), Milwaukee; Joseph Gale, M.D. (Surgery), Madison; Adolph Sahs, M.D. (Neurology), Iowa City; John Schindler, M.D. (Psychiatry), Monroe, Wisc.

All members of the Michigan State Medical Society are cordially invited to attend the always enjoyable and instructive meeting of the Upper Peninsula Medical Society.

* * *

Kenneth H. Johnson, M.D., Vice Speaker of the MSMS House of Delegates, is a busy Lansing practitioner who has his share of obstetrical cases. Therefore, the following telegram, addressed to William Bromme, M.D., Chairman of the MSMS Council, was received with sympathetic appreciation by members on the occasion of the December 17 Executive Committee of The Council meeting in Detroit:

"Regret inability to attend today's meeting.
Labor trouble.—KENNETH H. JOHNSON, M.D."

* * *

L. W. Shaffer, M.D., Detroit, recently was given high honor by being elected President of the American Venereal Disease Association (formerly American Neisserian Medical Society).

Congratulations, Dr. Shaffer.

* * *

Angus McLean, Award.—The Academy of Surgery of Detroit offers the Angus McLean Prize Award of $200 for the best essay on a surgical problem submitted by a resident or an intern of a hospital in the Greater Detroit area by March 1. For information, write Howard T. Howlett, M.D., 868 Fisher Bldg., Detroit 2, Michigan.

* * *

The Andrew S. Brunk Award has been created by the Michigan Health Council in memory of the late Dr. Brunk, President of the Michigan State Medical Society in 1944-45 and first President of the Michigan Health Council. The award will be presented for the outstanding community health council accomplishment of the year in Michigan.

* * *

The Third International Congress of Internal Medicine will be held in Stockholm, Sweden, September 15-18, 1954 under the auspices of the International Society of Internal Medicine. Professor Nanna Svartz, Caroline Medical Institute, Stockholm, is Congress Committee Chairman.

* * *

The American Cancer Society announces that Schenley Laboratories, Inc., has returned to its early penicillin strains to assist Ivor Cornman, M.D., of George

Washington University, in a search for an anti-cancer factor which has been found to kill cancer cells in test tubes without killing healthy tissue. The investigations are being conducted under the sponsorship of the American Cancer Society and the National Cancer Institute of Bethesda, Md.

* * *

The Third Interim Congress of the Pan American Association of Ophthalmology will be held at Sao Paulo, Brazil, June 17-21, 1954.

For program, write Professor Moacyr E. Alvaro, 1151 Consolacao, Sao Paulo.

* * *

Harry J. Loynd, President of Parke, Davis & Company, Detroit, predicts significant medical advances to strengthen the nation's health in the year 1954. "In the year ahead, and in the next decade, lies a great new world of expanded professional service. We are confident our industry has the vision and foresight to meet this challenge with intelligent planning and production," stated Mr. Loynd, in commenting on the greatest population boom in U. S. history. "As a result of health and medical advances in recent years," stated Mr. Loynd, "there are 12½ million persons over sixty-five now, and it is estimated there will be 16 million by 1960."

* * *

Over 180,000 babies were born in Michigan in 1953—the all-time record. At the same time, the death rate reached an all-time low of less than 9 per 1,000. Maternal deaths were at their lowest point, dropping below .5 per 1,000 live births.

What are similar statistics in those countries which have "enjoyed" socialized medicine for the past ten years or longer?

* * *

Cancer Fiction! Anent the current discussion regarding smoking having a possible connection with the increase in incidence of cancer of the lung, have you heard of the cancer survey in a neighboring state which unearthed a great increase in the incidence of rectal cancer?

The researchers found that every one of these affected used toilet paper—so a law is being drafted.

* * *

The Trudeau School of Tuberculosis at Saranac Lake, New York, will present its fortieth annual session, beginning Tuesday, June 1, and concluding June 25. According to the Michigan Tuberculosis Association, the course will cover all aspects of pulmonary tuberculosis and also certain phases of other chronic chest diseases, including those of occupational origin.

Registration is limited. Tuition fee is $100.00, payable to the Trudeau School on or before June 1, 1954. The Trudeau School of Tuberculosis has been approved for training of Veterans under Public Laws and those desiring to obtain Veteran's benefits should clear their registration with the Veterans Administration before the session begins. A few scholarships also are available to

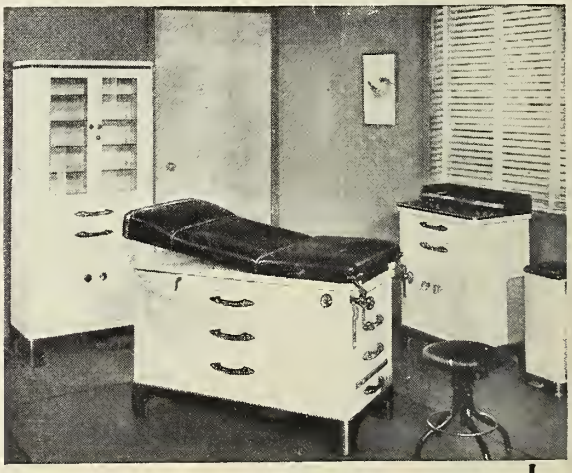
(Continued on Page 220)

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(Continued from Page 218)

those physicians qualifying. Communications should be addressed to: Secretary, Trudeau School, Saranac Lake, New York.

* * *

The AMA adopted a resolution regarding the late E. D. Spalding, M.D., at the Interim meeting in St. Louis, Missouri, December 3, 1953, as follows:

WHEREAS, Edward D. Spalding, M.D., an Alternate Delegate representing the Michigan State Medical Society to the AMA House of Delegates, was shot and killed as he departed from his office in Detroit to attend this Clinical Session of the AMA House of Delegates and

WHEREAS, at past sessions of this House, Dr. Spalding always was inspiring in his earnestness and loyal in attending to the duties assigned to him by the Michigan Delegation to the AMA House of Delegates, and

WHEREAS, Dr. Spalding as an active practitioner of medicine, was a brilliant clinician as well as a militant leader in his espousal of private practice as opposed to compulsory schemes inimical to patients' welfare, therefore be it

RESOLVED, that the AMA House of Delegates in session in St. Louis, December 2, 1953, express its deep sense of loss in the tragic and abrupt passing of E. D. Spalding, M.D., and bespeaks its sincere sympathy to his survivors, and be it further

RESOLVED, that a copy of this Resolution be prepared and be forwarded to Mrs. Spalding and the Spalding family.

* * *

The establishment of a three-year $15,000 fellowship for post-doctorate training in the science of nutrition was announced January 15 by the National Vitamin Foundation. The fellowship will be known as the Russell M. Wilder Fellowship, honoring Dr. Wilder, Rochester, Minnesota, recently retired Director of the National Institute of Arthritis and Metabolic Diseases of the National Institute of Health. Candidates may apply to the National Vitamin Foundation, 15 E. 58th Street, New York 22, N. Y., for application forms, on or before March 15, 1954.

The Medical Advisory Committee of the Michigan Chapter, Arthritis and Rheumatism Foundation, will have a dinner and business meeting on Thursday evening, March 11, 6:30 p.m., in Parlor F in the Sheraton-Cadillac Hotel, Detroit. This meeting will be held in conjunction with the Michigan Clinical Institute.

Ralph W. Shook, M.D., Kalamazoo, a member of The Council of the Michigan State Medical Society, became President of the Kalamazoo Academy of Medicine for the current year at the Academy's recent annual meeting. E. Gifford Upjohn, M.D., was chosen President-Elect.

* * *

F. L. Covert, M.D., of Gaines, was honored recently by the Durand (Michigan) Rotary Club for forty-three

(Continued on Page 222)

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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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years of service in the medical field that Dr. Covert performed for his community. A special plaque was presented to him during the meeting for always doing something for others—never thinking of himself—"for unselfish service to the people of this community."

American College of Surgeons, Michigan Chapter, will hold an all-day clinic and dinner meeting on Tuesday, March 9, 1954, during the Michigan Clinical Institute. The meeting will be held in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit.

Program:

Registration—8:00-8:30 a.m.

Morning Session—9:30 a.m.

Diagnosis of Tumors of the Neck—Harry C. Saltzstein, M.D., Detroit

Surgical Treatment of Aortic Stenosis. A Report of Seven Cases—Conrad R. Lam, M.D., Detroit

Visualization of Coronary Sinus Graft and Venous Pathways of the Heart in the Living Dog. Back operation II—A. Johnson, M.D., Detroit

Comprehensive Management of the Post Thrombophlebitic Syndrome—Alexander Blaine, III, Detroit

Discussion

Gastric Lymph Sac—Dayton O'Donnell, M.D., Detroit

Five-Year Discussion of Subtotal Gastric Resection —Kenneth Campbell, M.D., Detroit

Heterotopic Gastric Pancreatic Tissue—John Reid Brown-Nathan Berkson, M.D. Presented by Dr. Berkson, Detroit

Esophageal Hiatal Hernia—Ruben I. Shapiro, M.D., Detroit

Discussion

Luncheon—12:00 Noon

Afternoon Session—2:00 p.m.

The Injured Hand, Its Treatment and Rehabilitation—Joseph Posch, M.D., Detroit

Complications and Dislocations of the Hip—Sylvester O'Conner, M.D., Ann Arbor

Intramedullary Fixation and Fractures—Franklin Wade, M.D., Flint, Mich.

Kidney Injuries—Elwood Jenkins, Detroit

Discussion

Calhoun County Medical Society Cancer Registry Progress Report—James W. Herbly, M.D., Battle Creek

Splenectomy—A. B. Hodgman, M.D., Kalamazoo

Dupuytrens Contracture of the Foot—M. E. Pedersen, M.D., Detroit

Discussion

Business Meeting

Evening Activities—6:30 p.m.

Cocktails

Banquet—Speaker—Dr. Frederick Coller. Subject: Wm. Beaumont, M.D.

All Michigan Clinical Institute registrants are cordially invited to attend the scientific program and the banquet.

For further information, write E. A. Osius, M.D., 901 David Whitney Bldg., Detroit.

Michigan Speakers at AMA Clinical Session in St. Louis, Mo., were: Carl F. List, M.D., Grand Rapids, on "Relief of Intractable Pain"; Reed M. Nesbit, M.D., Ann Arbor, on "Surgically Remedial Congenital Urogenital Defects"; Chas. M. Stevenson, M.D., Detroit, on "Pelvic Inflammatory Disease"; P. S. Barker, M.D., Ann Arbor, Moderator of Panel on "Coronary Heart Disease and Angina Pectoris"; S. W. Hoobler, M.D., Ann Arbor, Member of Panel on "Modern Concepts in Management of Hypertension," and H. Marvin Pollard, M.D., Ann Arbor, on "The Role of Cortisone and ACTH in Gastrointestinal Lesions."

* * *

The American Academy of General Practice meets in the Cleveland Auditorium, Cleveland, Ohio, March 22-25, 1954. Sir Alexander Fleming, of London, discoverer of penicillin, will be one of the luminaries on a star-studded program. The President's Reception at the Cleveland Hotel, March 24, will give registrants an opportunity to greet Sir Alexander and Lady Fleming and the other distinguished speakers, including E. J. McCormick, M.D., Toledo, President, American Medical Association.

* * *

Michigan Medical Service Board of Directors will meet on March 31, May 12, July 17, September 15, and October 13, 1954.

The Blue Cross-Blue Shield National Conference will be in New York City, April 4 to 8, 1954.

* * *

Michigan doctors attending the AMA Clinical Session in St. Louis were:

W. W. Babcock, M.D., Detroit; L. R. Banner, M.D., Kalamazoo; P. S. Barker, M.D., Ann Arbor; Helen S. Barnard, M.D., Muskegon; W. D. Barrett, M.D., Detroit; S. A. Beckwith, M.D., Stockbridge; C. F. Boothby, M.D., Hartford; A. P. Brachman, Jr., M.D., Allegan; Wm. Bromme, M.D., Detroit; Louis Carbone, M.D., Detroit; J. S. DeTar, M.D., Milan; C. H. Flint, Jr., M.D., Hart; L. Fernald Foster, M.D., and J. R. Franck, Jr., M.D., Wakefield.

H. H. Gay, M.D., Midland; Alex Gaynor, M.D., Detroit; L. E. Grate, M.D., Charlevoix; J. M. Hammer, M.D., Kalamazoo; S. W. Hoobler, M.D., Ann Arbor; W. A. Hudson, M.D., Detroit; L. W. Hull, M.D., Detroit; W. H. Huron, M.D., Iron Mountain; F. P. Husted, M.D., Bay City; W. A. Hyland, M.D., Grand Rapids; R. A. Johnson, M.D., Detroit; D. J. Kilian, M.D., Midland; A. A. Klein, M.D., Detroit; and Theodore Kolvoord, M.D., Battle Creek.

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* * *

Conference for residents, interns and senior medical students of Michigan has been arranged by the Michigan Clinical Institute for Wednesday, March 10, 1954, in Parlors G-H-I, Sheraton-Cadillac Hotel, Detroit. Wm. Bromme, M.D., Detroit, will act as chairman.

The program, which starts at 2:30 p.m., with registration, top of stair, fifth floor, includes the following papers:

"Mechanics of Setting Up a Practice" by Warren R. Mullen, M.D., Pentwater, Michigan, Past President of Student American Medical Association.

"Public Relations" by L. Fernald Foster, M.D., Bay City, Secretary, Michigan State Medical Society.

Discussion

"Michigan Medical Service and the Doctor" by R. L. Novy, M.D., Detroit, President, Michigan Medical Service.

Cocktails, courtesy of Michigan Medical Service, will be served at 5:30 p.m., immediately following the scientific program.

RECENT ACTIVITY IN THE PLACEMENT BUREAU

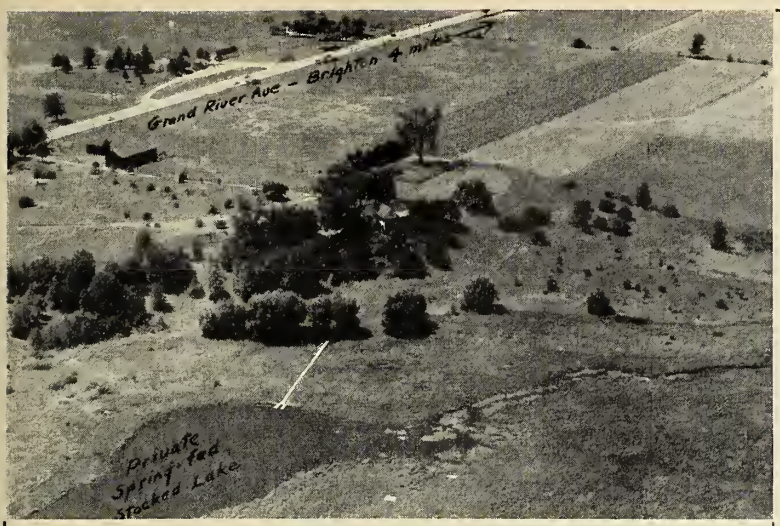
The following physicians have recently located in the towns named, coming from cities noted in parentheses; through services of the Placement Bureau:

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Niekamp, Harold M.D	Utica	(Detroit)
Wiley, Philip K., M.D.	Elk Rapids	(Colorado)
Allott, Hugh R., M.D.	Sault Ste. Marie	(Penna.)
Goding, R. F., M.D.	Dexter	(Kalamazoo)
Allen, R. B., M.D.	Dexter	(Flint)
Andros, Geo. J., M.D.	Lansing	(Chicago)
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Scott, John, M.D.	Frankfort	(Detroit)

The Placement Bureau is an activity of the Michigan Health Council, 706 N. Washington, Lansing, Michigan (Telephone 4-7665).

POSTGRADUATE COURSE IN OTOLARYNGOLOGY

The Department of Postgraduate Medicine, University of Michigan Medical School, announces the Otolaryngology Conference to be given at the University Hospital, Ann Arbor, Michigan, April 15, 16 and 17, 1954, under the direction of Dr. A. C. Furstenberg,



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Chairman of the Department of Otolaryngology at the University of Michigan Medical School.

Guest Lecturers.—Dr. J. A. Hilger, St. Paul, Minn.; Dr. H. P. Schenck, Philadelphia; Dr. Paul Holinger, Chicago; Dr. K. M. Day, Pittsburgh; and Dr. Lawrence R. Boies, Minneapolis, Minn.

Resident Lecturers.—Dr. A. C. Furstenberg, Dr. J. H. Maxwell, Dr. J. E. Magielski, Dr. Thomas Francis, Dr. Jerome Conn, Dr. E. R. Harrell, Jr., Dr. R. B. Sweet, Dr. H. E. Sloan, Jr., and Dr. Irving Blatt.

For further information, address: Dr. H. H. Cummings, Chairman, Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan.

DINNER HONORING DR. STAPLETON—MAY 11

A testimonial dinner honoring Dr. William J. Stapleton, Jr., will be held in the Grand Ballroom in the Sheraton-Cadillac Hotel on Tuesday evening, May 11. A reception in the Italian Garden will precede the dinner.

Dr. Stapleton will be honored as Michigan Physician of the Year and also as a scholar and teacher. As former acting Dean of the Wayne University College of Medicine and now Professor Emeritus, he has annually prepared a review of 100 books for the physician. His reviews are published in the *Detroit Medical News.*

The subscription dinner will be arranged by a committee under the chairmanship of Don W. McLean, M.D., 1066 Fisher Building, Detroit 2, representing the Wayne University College of Medicine Alumni Association.

"All members of the medical profession and lay friends of Dr. Stapleton are cordially invited to attend," stated Dr. McLean.

MICHIGAN REGISTRATIONS IN MEDICINE

(Continued from Page 150)

igan), Wyman C. Cole, Jr. *(University of Wayne),* Serafeim P. Masouredis *(University of Michigan),* Kenneth Israil *(University of Michigan),* Loyal W. Lodar *(University of Wayne),* Romuald H. Gomley *(University of Michigan),* Willis E. Gouwens *(University of Chicago),* Warren S. Witus *(University of Michigan),* Lawrence H. Feenstra *(University of Michigan),* Wm. F. B. Kutsche *(University of Wayne),* John T. Clymer *(University of Michigan),* Gail L. Hale *(University of Wayne),* John C. Smithson *(University of Michigan),* Wm. P. Edmunds *(University of Michigan),* Adam C. McClay *(University of Michigan),* Evon R. Williams *(University of Northwestern),* Andrew J. Wood *(University of Howard),* Harvey J. Bratt *(University of Michigan),* Norman A. Gremel *(University of Michigan),* Jose M. Siero *(University of Nicaragua),* John V. Kelly *(University of Wayne),* David W. Williams *(University of Oregon),* Herman Eldersveld *(University of Michigan),* Robert V. Anderson *(Jefferson),* Wm. C. Bailey *(University of Wayne),* Margaret Dietze *(University of Pittsburgh),* John F. Fea *(Loyola),* Ben Fisher *(University of Illinois),* Leo B. McSherry, Jr., *(Loyola),* Burwell Seymour *(Western Ontario),* Charles H. Steele *(University of Alabama),* Ralph M. Stephan *(University of Chicago),* Bruce T. Wheatley *(University of Wayne),* Arthur R. Abbin *(University of Michigan),* Asa W. Springer, Jr. *(University of Wayne),* Jerome J. VanGasse *(University of Michigan),* Donovan F. Hinchman *(University of Michigan),* Donald C. Camp *(University of Michigan),* Richard D. Judge *(University of North-Western),* Robert F. Thimmig *(University of Marquette);* Lewis T. Warren *(University of Michigan),* Andres D. Resto-Soto *(University of Michigan),* Avis Margaret Olson *(University of Manitoba),* Lawrence E. Grennan *(University of Wayne).*

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

DISABILITY EVALUATION. Principles of Treatment of Compensable Injuries. Earl D. McBride, B.S., M.D., F.A.C.S. Assistant Professor in Orthopedic Surgery, University of Oklahoma School of Medicine; Attending Orthopedic Surgeon to St. Anthony's Hospital; Associate Orthopedic Surgeon to Wesley Hospital; Visiting Surgeon to W. J. Bryan School for Crippled Children; Chief of Staff to Bone and Joint Hospital, Oklahoma City, Oklahoma. 375 figures. Fifth edition. Philadelphia, London, Montreal: J. B. Lippincott Company. Price $15.00.

The new edition of Doctor McBride's popular treatise on compensable injuries has been enlarged and improved to expand the medical treatment of the injured workman as a social responsibility, and to aid the physician handling industrial work perform his duty to the patient and the employer more efficiently in the current growth of industrial laws. His enlarged injury charts establish a scientific basis for evaluating the end results of injury when mathematical or monetary values are involved.

Excellent charts, with accompanying explanation, illustrate the author's method of determining disability which is based on the measurement of function in respect to general working capacity. The type of patient examination necessary to prepare for testimony in court is stressed, with an excellent chapter on the detection of malingering. The discussion on evaluating permanent disability, including a method of rating fracture results is most complete. Routine examination of the back is well illustrated and discussed, and is accompanied by a fine outline for the differential diagnosis of backache. The rating schedule of partial permanent disability has been enlarged.

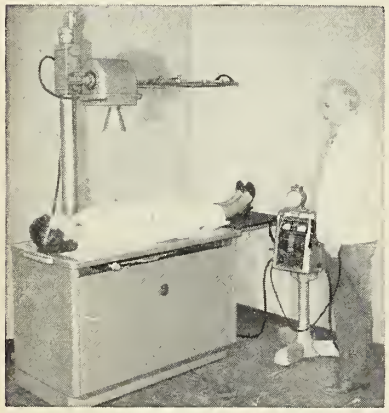
A new feature of the book is a chapter on causal relation of injury, disease and disability in which the author covers a wide range of mental and physical diseases which have been attributed to occupation, and the effect of trauma upon pre-existing disease, such as arthritis. The examining doctor's part in the employment of the disabled person is discussed, with charts and tests which aid the appraisal of an individuals physical capacity versus the physical demands of the job. This is an important reference book for any physician who treats industrial cases.

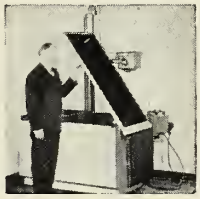
S.B.W.

CURE YOUR NERVES YOURSELF. By Louis E. Bisch, B.A., M.D., Ph.D. New York: Wilfrid Funk, Inc., 1953. Price $3.50.

This is another of those self-help books that have become quite plentiful. The author begins with an apologetic explanation of the need for another book of this type. If he is correct in his ideas, then the remedy for most neurosis would be solved by more librarians and

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fewer physicians, or the physician could simply hand out books and cure his neurotic patients. In a book of this sort, the remarks necessarily have to be general, and we find the usual psychological patter. This is supposedly written primarily for laymen and lacks the scientific approach for physicians.

G.K.S.

RESPIRATORY DISEASES AND ALLERGY. New Method of Approach. By Joseph S. Smul, M.D. author of Digestive Diseases and Food Allergy, fellow National Gastro-Enterological Association; Member N.Y. Academy of Sciences; formerly Vice President, Manhattan Roentgen Ray Society; Association of Gastro-Enterologists, Beth David Hospital; Clinical Assistant Physician, Beth Israel Hospital. 58 pages. New York: Medical Library Co., ——. Price $2.75.

This is a very short book, consisting of only fifty-seven pages of printing. It is divided into three sections.

Section I deals with "a new method of approach" to many respiratory diseases. Included are such conditions as neurosis of the respiratory tract, hay fever, vaso-motor rhinitis, bronchiectasis, and many others. These, he groups together under the term respirallergy.

Section II deals with infectious diseases of the respiratory system. Nothing new has been added to current concepts.

Section III, of only two pages, deals inadequately with the very popular lay and medical topic: Neoplastic Diseases.

The index is well done.

It is the avowed purpose of the author to reduce confusion on the subject of respiratory diseases. To this reviewer, he has only added to the existing confusion.

L.P.S.

MANAGING YOUR CORONARY. By Dr. William A. Brams. Illustrations by Hertha Furth. Philadelphia and New York: J. B. Lippincott Company, 1953. Price $2.95.

Here is a book that can be recommended for reading by the patient who has suffered a coronary attack, setting forth in clear and easily understandable language the answers to the many queries regarding cause, mechanism, treatment, restrictions, outlook that come to the mind of both the patient and those caring for him.

The approach is an optimistic one, easy to read, authoritative and yet entertaining, with many of the do's and don'ts emphasized with clever pencil sketches. It is a light book of only 150 odd pages, well printed and easy to pick up and read at any point. Many of the topics are emphasized by interesting case anecdotes. The author is an experienced clinician and writer, thoroughly familiar with the questions of these patients.

Your patient will thank you for recommending the purchase of this inexpensive volume, not only for his own reading and guidance, but for the information of those close to him as well.

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FILMS IN PSYCHIATRY, PSYCHOLOGY AND MENTAL HEALTH. By Adolf Nichtenhauser, M.D., Marie L. Coleman, and David S. Ruhe, M.D. Medical Audio-visual Institute of the Association of American Medical Colleges. New York: Health Education Council, 1953. Price $6.00.

The authors state that this book is a catalogue and presentation of representative films for use in the study of subjects pertaining to psychiatry, psychology and mental health. It consists of fifty-one critical film reviews.

The body of the review consists of the content description and appraisal. There is an analysis of the purpose and objectives of the film, which includes the type of presentation, effectiveness, utilization and distribution. The purpose of the book is to facilitate the selection of films and improve their application.

For those interested in these subjects, who need films for teaching purposes, this will prove to be a handy and useful volume. The only apparent objection is the cost of the binding for a catalogue which may soon be outdated.

G.K.S.

ANTIBIOTICS. By Robertson Pratt, Ph.D., Professor of Pharmacognosy and Plant Physiology, University of California College of Pharmacy; Consultant on Antibiotics and Jean Dufrenoy, D. Sci. (Paris) Research Associate in Antibiotics, University of California College of Pharmacy. Second edition, Philadelphia, London, Montreal: J. B. Lippincott Company, 1953. Price $7.50.

The rapidly expanding field of the study of antibiotics and their application is fraught with a voluminous technical literature of many thousands of papers dealing with various aspects of the subject.

It is the avowed purpose of this work, now in its second edition, to extract from this literature "the facts and principles of fundamental and permanent value relating to antibiotics" and to interpret and modify these fundamentals in the light of the newer discoveries.

To this end, some 350 pages and seventeen chapters have been devoted to exposition of fundamental concepts: industrial production, screening and assaying methods: aspects of application taking each of the antibiotics separately and then in mixed therapy, as relates to medical practice, then in dental and oral surgery, and in agriculture, and finally a section of dealing with the role of antibiotics in modifying biologic and social systems. Tables of suggestive reading of the more comprehensive literature are included at the end of each chapter.

This is not only a book for the average physician's shelf, but would find a useful niche in the average medical and hospital library.

R.W.B.

INTRODUCTION TO PHYSIOLOGICAL AND PAHTHOLOGICAL CHEMISTRY. By L. Earle Arnow, Ph.G., B.S., Ph.D., M.D., Vice President and Director of Research, Sharp & Dohme Division of Merck & Co., Inc., West Point, Pennsylvania; Professor of Chemistry, Bryn Maur College Summer School of Nursing, Bryn Mawr, Pennsylvania, 1941-1943, 1945; formerly Assistant Professor of Physiological

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Chemistry, University of Minnesota Medical School, and Lecturer in Physiological Chemistry to Students Enrolled in the University of Minnesota, School of Nursing, Minneapolis. Revised with the Assistance of Marie C. D'Andrea, R.N., B.S., in Nursing Education, Educational Director, School of Nursing, St. Vincent's Hospital, Indianapolis. Fourth edition. St. Louis: The C. V. Mosby Company, 1953. Price $3.75.

This book and its ancillary text, which is devoted to correlated laboratory experiments, reflect the current thought in the teaching of medical biochemistry for student nurses. It minimizes the chemical structural changes, so obtruse to the embryo nurse with a questionable high school background in the subject, and emphasizes the newer trends, examples being, nuclear physics, endocrinopathies, and various vitamin deficiencies. Particularly good chapters are the ones devoted to lipids and metabolism; and it is interesting that recent discoveries, such as the fluorophosphates, are taken up under a small section on chemical warfare. The laboratory manual which accompanies it is good and the line drawings are fair, but it probably should be more fully illustrated.

A.A.H.

DIABETIC CARE IN PICTURES. Simplified Statements with Illustrations Prepared for the Use of the Patient. By Helen Rosenthal, B.S., Former Chief, Frances Stern Food Clinic, The Boston Dispensary; Former Assistant in Medicine, Tufts College Medical School, and Joseph Rosenthal, M.D., Physician-in-charge, Diabetes Clinic, The Boston Dispensary; Assistant Professor of Medicine, Tufts College Medical School; Associate Staff, Joseph H. Pratt Diagnostic Hospital. (All Units of the New England Medical Center). 128 original illustrations (including 7 in color). Prepared under the direction of the authors. Second edition. Philadelphia, London, Montreal: J. B. Lippincott Company, Price $3.00.

Written primarily for the layman who has diabetes, this book is an extremely well-presented guide. It tells of the disease and gives the theories of treatment. An unusual feature is presented in the clear and numerous pictures of the foods, the amounts, and diagrams showing selections. There is a chapter on substitutions which may be made, and these are also fully illustrated. Diet tables and colorie values are given, with a standard diet which the doctor must vary for different persons. We consider this one of the best books for the purpose we have seen.

SEXUAL BEHAVIOR IN THE HUMAN FEMALE. By Alfred C. Kinsey, Wardell B. Pomeroy, Clyde E. Martin, Paul H. Gebhard, Research Associates; and others on the Staff of the Institute for Sex Research, Indiana University. Philadelphia—London: W. B. Saunders Company, 1953. Price $8.00

Some five years ago, the undersigned reviewed "Sexual Behavior in the Human Male" and among other comments stated that this was chiefly a reference book, whose chief value was to psychiatrists, urologists, gynecologists, and medical social workers. A review of the present book not only confirms this opinion of the first, but places the second volume in the same category.

The format of Parts I and II of the book closely

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resemble the first book. Data are given as to incidence and frequency of various types of sexual activity with extensive tables. These are broken down, and an attempt is made to show how such factors as age, religious training, social background and decade of birth, influence women's sexual activity. Moral, legal and social aspects are discussed with some asperity. The authors theorize a good deal, but in drawing their conclusions leave out such all-important factors as love, motherhood and human emotions.

Part III compares the male and female anatomically, physiologically, psychologically and finishes with a dissertation on hormones. To the informed physician Part III presents nothing new but is probably of value to the laity and should increase its popularity.

The book is well documented, and only time can fully determine its value.

D.K.H.

CORRECTION

THE JOURNAL of the Michigan State Medical Society apologizes for the error in the listing on page 96 of the January issue. The name should read E. D. Spalding, M.D.

The Ford Motor Company reports that it has sold more cars in the month of January, 1954, than in any January in its fifty years of work. Sold, not built, means there is some prosperity.

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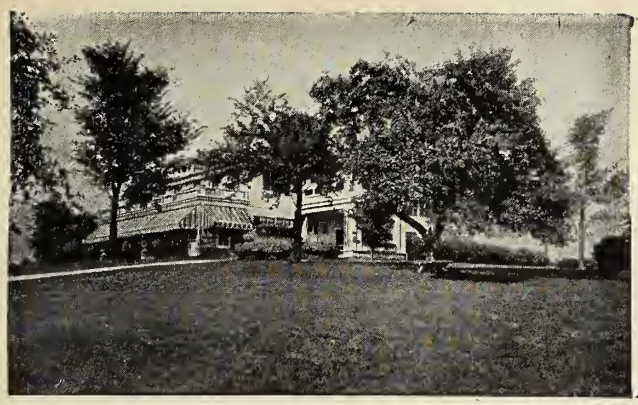
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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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C. G. Jennings, M.D.



F. S. Leeder, M.D.

MSMS

ANNUAL SESSION

Sheraton Cadillac Hotel

DETROIT

September 29-30-October 1

1954

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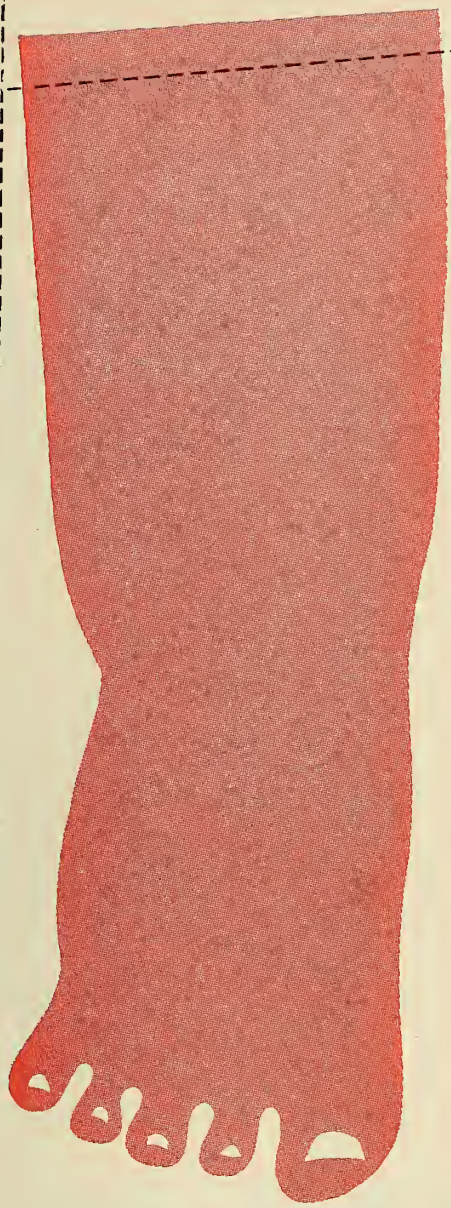
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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 16, 1953

Seventy-seven items were presented to the Executive Committee of The Council on December 16. Chief in importance were:

- **Utilization of Blue Cross-Blue Shield.**—A "Golden Goose" breakfast was scheduled for March 11, 1954, during the Michigan Clinical Institute with President L. W. Hull, M.D., to be Chairman and brief talks to be given by K. B. Babcock, M.D., Detroit, President of Blue Cross; R. L. Novy, M.D., Detroit, President of Blue Shield; Wm. S. Reveno, M.D., Detroit, Chairman, Advisory Committee to Michigan Hospital Service, and Harry F. Becker, M.D., Field Secretary of this Committee. All registrants at the Michigan Clinical Institute are to be invited to attend.
- **The monthly financial reports** and bills payable were studied and approved. Auditor's report of Cancer Control Committee for year ending October 31 was approved.
- **Group health and accident insurance program,** authorized by 1953 MSMS House of Delegates: Progress report was presented and a paragraph for Secretary's Letter No. 168, was authorized.
- **Resignation of Clifford H. Keene, M.D.,** as Chairman of the MSMS Cancer Control Committee. Inasmuch as Dr. Keene is moving permanently to California, his resignation was accepted with regret and with thanks for an inspiring and valuable contribution to cancer control work in Michigan.
- **Committee Reports**—The following reports were given consideration: (a) Legislative meeting of November 19; (b) Geriatrics Committee, December 1; (c) Committee on Arrangements for 1954 Conference of Residents, Interns and Senior Medical Students, December 9; (d) Medical Advisory Committee to Michigan Hospital Service, December 9; (e) Hospital Relations Committee, December 13; (f) Beaumont Memorial Committee, December 15; (g) Report on AMA Clinical Session of December 1-4 in St. Louis, Mo., presented by Wm. A. Hyland, M.D., Grand Rapids, Chairman of Michigan's delegation to the AMA; (h) Report on meeting in Governor's office re Basic Science Act was presented, together with a letter from H. A. Furlong, M.D., Pontiac, Chairman of the MSMS Committee on Study of the Basic Science Act.
- **R. W. Shook, M.D.,** Kalamazoo, was appointed to the Finance Committee of The Council, and J. Duane Miller, M.D., Grand Rapids, was appointed to the County Societies Committee of The Council.

  C. T. Ekelund, M.D., Pontiac, was appointed to the Beaumont Memorial Committee. Ivan A. LaCore, M.D., Pontiac, was appointed as MSMS Representative to the Policy-Making Committee on Psychiatric Nursing, a committee of the Michigan State Nurses Association. J. A. Witter, M.D., Detroit, was reappointed as MSMS representative to Michigan Committee on Careers in Nursing, also a committee of the Nurses' Association.

  G. B. Saltonstall, M.D., Charlevoix. was appointed as MSMS representative to the meeting of the American Medical Education Foundation in Chicago, January 24. S. E. Gould, M.D., Eloise, was appointed as MSMS representative to the National Conference on Trichinosis, March 1, Chicago.

  B. L. Masters, M.D., Fremont, was appointed as MSMS representative to the National Conference on Rural Health, Dallas, March 10-11, 1954.
- **President L. W. Hull** announced that he had invited Charles W. Mayo, M.D., Rochester, Minnesota, to be the Biddle Lecturer of 1954.
- **Wm. A. Hyland, M.D.,** Grand Rapids, was appointed Chairman of the MSMS Cancer Control Committee.

  John M. Wellman, M.D., was appointed a member of the Michigan Cancer Co-ordinating Committee, representing the MSMS.

  H. Waldo Bird, Jr., M.D., Detroit, was appointed Chairman of the MSMS Mental Hygiene Committee.
- **Chairmen of Assemblies** at the 1954 Michigan Clinical Institute were appointed: Grover C. Penberthy, M.D., Detroit; V. C. Abbott, M.D., Pontiac; H. H. Cummings, M.D., Ann Arbor; W. H. Steffenson, M.D., Grand Rapids; D. A. Koch, M.D., Port Huron.

  Frank Van Schoick, M.D., Jackson, was appointed by the Michigan Heart Association as Chairman of the Friday morning, March 12, Assembly (Michigan Heart Day).
- **Membership Questionnaire re Annual Session.**—Secretary Foster reported 931 questionnaires had been returned by MSMS members giving their estimate of the 1953 and previous MSMS Annual Sessions and offering suggestions for improvement. The high return and the many good suggestions represent a great interest in the Annual Session on the part of MSMS members; this was gratifying to The Council, charged with the responsibility of programming these conventions.

(Continued on Page 244)



For the Peptic Ulcer Patient
BEDEVILED BY NIGHT PAIN

AMPHOJEL®

ALUMINUM HYDROXIDE GEL

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

AMPHOJEL helps patients sleep by neutralizing acid promptly . . . promoting pain relief through the night. A double dose at bedtime will effectively control "night pain" in most patients.

AMPHOJEL is a double gel—one *reactive*, for immediate buffering of gastric acid; the other, *demulcent*, for prolonged coating of the gastric mucosa—protection for the granulation tissue in the ulcer crater.

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Philadelphia 2, Pa.

Available: Suspension: Bottles of 12 fl. oz.
Tablets: Boxes of 30 (5 gr.), bottles of 100
Boxes of 60 (10 gr.)

Say you saw it in the Journal of the Michigan State Medical Society

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 242)

- **Editor Wilfrid Haughey's suggestion** that a survey of THE JOURNAL of the Michigan State Medical Society be circulated among its advertisers and prospective advertisers, to stimulate their greater interest in this book, and further to obtain progressive ideas for typographical improvement, was approved.
- **Representatives of Veterans' organizations** were present with the Executive Committee of The Council to discuss mutual problems: Joseph W. Mann, Veterans of Foreign Wars; Carleton L. Seaman, American Legion; John Ward, AMVETS. Each of these men brought a message from his organization thanking MSMS for its co-operation and understanding of the Michigan veterans' problems.
- **The monthly progress report of the Public Relations Counsel** included items re: (a) indoctrination brochure, (b) progress report on films available to county medical societies, (c) report of meeting of Subcommittee on Radio-Television, November 25, (d) legislative possibilities, (e) formation of Michigan Adult Education Association to act as a co-ordinating force for all adult education activity in the state.
- **The monthly reports** of the Council Chairman, the President, the President-elect, Secretary, and Editor were presented and approved.
- **Matters of mutual interest** were discussed with A. E. Heustis, M.D., Michigan Commissioner of Health, including (a) minimum standards for hospitals, (b) TB case finding program, (c) possible legislation, (d) multiphasic examinations in industry, (e) polio vaccination, and (f) venereal disease reporting.
- **Report of the Legal Counsel** on the 1953 MSMS House of Delegates' resolution concerning the American College of Surgeons action on impractices was presented and referred to the 1954 House of Delegates.

GROUP HEALTH AND ACCIDENT INSURANCE—PROGRESS REPORT

This program, approved by the 1953 MSMS House of Delegates and underwritten by the Provident Life and Accident Insurance Company of Chattanooga, Tennessee, became effective on November 15, 1953, as promised. Several mailings and personal solicitations ensued until the middle of December, resulting in a very satisfactory enrollment. All valid applications are now in force —and several claims already have been paid by Provident.

Enrollment by individual solicitation will again

(Continued on Page 246)

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954		
Spring	MSMS Postgraduate Extramural Courses	State-wide
April 14	Genesee County Medical Society 9th Annual Cancer Day	Flint
May 6	Ingham County Medical Society Clinic Day	Lansing
May 11	Dedication of new Wayne University Medical College Building	Detroit
May 11	Testimonial Dinner honoring William J. Stapleton, Jr., M.D., sponsored by Wayne University College of Medicine Alumni Association, Wayne County Medical Society, and Michigan State Medical Society	Sheraton-Cadillac Hotel, Detroit
May 12	Annual Clinic Day and Alumni Reunion, Wayne University College of Medicine (testimonial to Michigan's Foremost Family Physician, Wm. J. Stapleton, Jr., M.D.)	Hotel Fort Shelby, Detroit
May 20	American College of Surgeons Annual Symposium on Trauma and Nutrition	Ann Arbor
June —	Bon Secours Hospital Annual Clinic Day	Detroit
June 18	Annual Clinic Day, St. Clair County Medical Society	St. Clair Inn, St. Clair
June 18-19	Upper Peninsula Medical Society Annual Meeting	Menominee
June 21-25	AMA Annual Session	San Francisco
July 17	Beaumont Memorial Dedication	Mackinac Island
July 29-30	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
September 29-30-October 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
Autumn	MSMS Postgraduate Extramural Courses	State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.



a good "mixer"

for your cough prescriptions

especially valuable when allergic factor

is suspected or present

Chlor-Trimeton syrup q.s. ad

• taste appeals to young and old

compatible with commonly prescribed medications

Contains CHLOR-*TRIMETON*® Maleate

(brand of chlorprophenpyridamine maleate), 2 mg. per teaspoonful (4 cc.).

Schering

CHLOR-*TRIMETON* SYRUP

SCHERING

GROUP HEALTH INSURANCE

(Continued from Page 244)

be available in the early spring. The MSMS officers feel that your group health and accident insurance program—the first and only group health and accident insurance program endorsed by the Michigan State Medical Society—is one of the choice privileges of Michigan State Medical Society membership.

BEAUMONT MEMORIAL

The Dedication on Mackinac Island is scheduled for Saturday, July 17, 1954. All MSMS members are cordially invited to be present on this memorable occasion.

The Beaumont Memorial is now complete except for a bit of landscaping and the furnishing of the interior. A total of $41,226.83 has been spent on the Memorial, to December 31, 1953. Contributions from Doctors of Medicine and other friends total $31,484.67. Additional contributions, to close up this gap, will be gratefully received. If any members have not contributed their small share of the Beaumont Memorial, now is the time to get their names on the roster of contributors.

Remember the Dedication date—Saturday, July 17, 1954—a great day for Michigan Medicine.

GOVERNOR'S MESSAGE

The Governor's Message to the Michigan Legislature on January 18 comprised nine mimeographed sheets.

Exactly half of these nine sheets—50 per cent of the Governor's message—was devoted to medical and health matters including: tuberculosis, both case-finding and commitment of recalcitrant patients; mental health, including expansion of adult and child psychiatric clinics; children's psychiatric hospital at Northville, and construction of the psychiatric institute at Wayne University; and an amendment to the Basic Science Law.

Health and Medicine truly are items of major interest—to government and to the public.

The modern medical man truly has the opportunity and indeed the responsibility for modern leadership!

STATE SENATORS

Question: Who are the individuals we select as our Michigan State Senators?

Answer: The 1954 Legislature is a good example. The people chose Senators from all walks of life.

The 1954 Senate is comprised of ten attorneys, four insurance men, one real estate dealer, two automobile dealers, one mortician, one motel owner, two merchants, four farmers, one director of public relations, one druggist, one maintenance man, three retired, one rancher. (Thirteen occupations).

MEDICAL TELEVISION SHOWS, OVER WJBK-TV

Sponsored by the Michigan Health Council

Date	Subject	Guests
November 8, 1953	Pathology	D. H. Kaump, M.D., and O. A. Brines, M.D., Detroit
November 15, 1953	Radiology	J. E. Lofstrom, M.D., and C. K. Hasley, M.D., Detroit
November 22, 1953	Diabetes	Myer Teitelbaum, M.D., G. C. Thosteson, M.D., and Miss Elizabeth Vaughn, Detroit
November 29, 1953	Care of Your Teeth	Dr. Arthur V. Diedrich and Dr. Joseph L. Champagne, Detroit
December 6, 1953	Health on the Job	O. T. Mallery, Jr., M.D., and Mrs. Marion French, Ann Arbor
December 13, 1953	Holiday Hazards	Inspector Donald Quinn, John Wise and Garnet Griffin, Detroit
December 20, 1953	Food and Nutrition	Mrs. Alice Walsh, Detroit, and Miss Marie Buckley, Lansing
December 27, 1953	Film: "Operation Herbert"	
January 3, 1954	The March of Dimes	Mr. William Miller, Highland Park, and Mr. Donald Barton, Detroit
January 10, 1954	Michigan Rural Health Conference	O. K. Engelke, M.D., Ann Arbor; Mr. H. W. Brenneman and Mr. E. H. Wiard, Lansing
January 17, 1954	The Common Cold and Allergies	G. T. McKean, M.D., and Homer Howes, M.D., Detroit
January 24, 1954	New Drugs and Their Uses	Dr. Harvey Merker, J. P. Gray, M.D., and Mr. G. B. Wolfer, of Detroit
January 31, 1954	New Hope for Hearts	H. L. Smith, M.D., Detroit
February 7, 1954	Tuberculosis	H D. Ireland, M.D., Grand Rapids, and William Tuttle, M.D., Detroit.

Among the Potent Hypotensives

Noteworthy for its SAFETY

Veriloid®

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A selective alkaloidal extract (alkavervir fraction) of Veratrum viride, Veriloid presents these noteworthy features when a potent hypotensive agent is indicated. Its dosage forms provide notable flexibility in treatment.

●Biologic assay—based on actual blood pressure reduction in mammals —assures uniform potency and constant pharmacologic action.

●Blood pressure is lowered by centrally mediated action; there is no ganglionic or adrenergic blocking.

●Therapy is rarely, if ever, fraught with the danger of postural hypotension.

●Hypotensive action is independent of alterations in heart rate.

●Cardiac output is not reduced.

●Renal function, unless previously rossly reduced, is not compromised.

Cerebral blood flow is not decreased.

Cardiac work is not increased, ıycardia is not engendered.

› dangerous toxic effects from administration, no deaths atable to Veriloid have ever eported. Side actions of sia-, substernal burning, bradynausea, and vomiting (due osage) are readily overcome and thereafter avoided by dosage adjustment.

●In broad use over five years, literally in hundreds of thousands of patients, no other sequelae have been reported, whether Veriloid is given orally or parenterally.

●Tolerance or idiosyncrasy rarely develops; allergic reactions have not been encountered. Hence tablets Veriloid can be given for the long course of treatment required in severe hypertension.

●Continuing therapy with Veriloid has not led to interference with appetite or with excretory function.

●Because of its rapidly induced, prolonged action (6 to 8 hours), tablets Veriloid provide around-the-clock hypotensive effect from 4 doses daily, make today's dosage effective today, and usually prevent hypertensive "spiking" during the night.

●A notable safety factor in intravenous administration is: *the extent to which blood pressure is lowered is directly within the control of the physician.*

Tablets

Slow-dissolving, scored tablets in 2 mg. and 3 mg. potencies; produce gratifying response in many patients with moderate to severe hypertension; in fully 30% of patients this response can be maintained for long periods;[1] combination with other hypotensive agents greatly increases this percentage.[2] Initially, 9 mg. daily, in divided doses, not less than 4 hours apart, preferably after meals. Dosage to be increased gradually, by small increments, till maximum tolerated dose is reached. Maintenance dose, 9 to 24 mg. daily.

Solution Intravenous

For immediate reduction of critically elevated blood pressure in hypertensive emergencies such as hypertensive states accompanying cerebral vascular disease, hypertensive crisis (encephalopathy), toxemias of pregnancy; lowers blood pressure promptly, to any degree the physician desires, and with notable safety, since excessive hypotensive and bradycardic effects are readily overcome by simple means. Supplied in a combination package containing one 5 cc. ampul and a 20 cc. vial of diluent, and in boxes of six 5 cc. ampuls. Solution contains 0.4 mg. Veriloid per cc.

Solution Intramuscular

For maintenance of blood pressure in such critical instances, and for primary use in less critical situations not showing the same immediate urgency. Provides 1.0 mg. Veriloid per cc. in isotonic aqueous solution incorporating one per cent procaine hydrochloride. A single dose lowers blood pressure significantly, reaching maximum hypotensive effect in 60 to 90 minutes. By repeated injections (every 3 to 6 hours) blood pressure may be kept depressed for hours or days if necessary. In boxes of six 2 cc. ampuls. Complete instructions (dosage and administration) with every ampul of the parenteral preparations should be noted carefully.

1. Kauntze, R., and Trounce, J.: Treatment of Arterial Hypertension with Veriloid (Veratrum Viride), Lancet *2*:1002 (Dec. 1) 1951.
2. Wilkins, R.W.: Combination of Drugs in the Treatment of Essential Hypertension, Mississippi Doctor *30*:359 (Apr.) 1953.

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Heart Beats

WORLD HEART CONGRESS SET FOR WASHINGTON

September 12-17, 1954

The nation's capital will be the scene of a historic world medical gathering next September 12 through 17, when physicians and research scientists from many nations join their United States colleagues in Washington, D. C., for a combined meeting of the Second World Congress of Cardiology and the Twenty-Seventh Scientific Sessions of the American Heart Association. This will be the first international medical gathering of its kind ever held in the United States. In making this announcement, Dr. L. W. Gorham, Secretary-General of the Congress, said the fusion of the two meetings into a single integrated program has been approved by the International Society of Cardiology and the Board of Directors of the American Heart Association.

Opening ceremonies on September 12 will include addresses by leading figures in government and the medical profession at Constitution Hall, and a reception at the Mayflower Hotel. This will be followed by five days of intensive scientific discussion at the National Guard Armory, in one of the most comprehensive programs relating to heart and blood vessel diseases ever presented. Formal scientific papers will be presented in English, French and Spanish. Round Table conferences will deal with such subjects as high blood pressure, congenital heart disease, hardening of the arteries, electrocardiography and the preventive aspects of heart disease. Actual cases will be discussed in a series of clinical pathological sessions. Simultaneous translation facilities in French, English and Spanish will be provided for the round table and clinical pathological conferences.

The First World Congress of Cardiology was held in Paris in September, 1950, under the auspices of the International Council of Cardiology, and it was at that meeting that the International Society of Cardiology was formed. The Scientific Sessions of the American Heart Association have hitherto been held in conjunction with the Association's Annual Meeting. This year, however, the Annual Meeting will be held separately on Thursday and Friday, April 1 and 2, at the Conrad Hilton Hotel in Chicago, and will be followed by a special two-day scientific program on Saturday and Sunday, April 3 and 4, presented by the Association's newly organized Section on Clinical Cardiology.

Initial financial support for the Congress in Washington next September is being provided by the American Heart Association, the National Heart Institute of the United States Public Health Service, the Lasker Foundation and the Washington, D. C., Heart Association.

Chairman of the Organizational Committee for the Congress is Dr. Paul D. White, who is also Executive Director of the National Advisory Heart Council, an advisory body of the National Heart Institute, and consultant in medicine at Massachusetts General Hospital, Boston. Dr. White also will serve as President of the Congress. He is being assisted by Dr. Robert L. King, President of the American Heart Association, and Dr. James Watt, Director of the National Heart Institute as Co-Chairmen of the Congress.

Membership in the Congress is open to all members of the various affiliated national cardiac societies and associations of the world, and to other physicians and scientific workers of comparable status residing in countries where national cardiac societies are not as yet established. Non-members are invited to attend the Congress by special invitation from the Organizational Committee. Applications for membership must be received at the Congress office no later than April 1, 1954.

Titles and abstracts of papers from the United States and Canada must be received on or before April 1, 1954, directed to the attention of Dr. Charles D. Marple, Medical Director, American Heart Association, 44 East 23rd Street, New York 10, N. Y. Contributors from countries outside the United States are required to submit titles with abstracts, which may be accompanied by translation in French, Spanish or German, to the Secretaries of their national cardiological societies as soon as possible.

A booklet containing detailed information about requirements for abstracts, registration fees, hotel accommodations, social events, visits to medical centers in the Washington area and post-congressional tours to cardiac centers in other parts of the United States, and other aspects of the program may be obtained by writing to Dr. L. W. Gorham, Secretary-General, Second World Congress of Cardiology, 44 East 23rd Street, New York 10, N. Y.

Both scientific and industrial exhibits have been planned for the Congress. Industrial firms interested in presenting exhibits may communicate with Steven K. Herlitz, Exhibits Manager, 280 Madison Avenue, New York 16, N. Y.

in arthritis
and allied disorders

BUTAZOLIDIN
(brand of phenylbutazone)

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potent, non-hormonal antiarthritic agent

Its therapeutic effectiveness substantiated by more than fifty published reports, BUTAZOLIDIN has recently received the Seal of Acceptance of the Council on Pharmacy and Chemistry of the American Medical Association.

In the treatment of arthritis BUTAZOLIDIN produces prompt relief of pain. In many instances relief of pain is accompanied by diminution of swelling, resolution of inflammation and increased freedom and range of motion of the affected joints.

BUTAZOLIDIN is indicated in:

Gouty Arthritis	Rheumatoid Arthritis
Psoriatic Arthritis	Rheumatoid Spondylitis

Painful Shoulder (including peritendinitis, capsulitis, bursitis, and acute arthritis)

Since BUTAZOLIDIN is a potent agent, patients for therapy should be selected with care; dosage should be judiciously controlled; and the patient should be regularly observed so that treatment may be discontinued at the first sign of toxic reaction.

Physicians unfamiliar with the use of BUTAZOLIDIN are urged to send for complete descriptive literature before employing it.

BUTAZOLIDIN® (brand of phenylbutazone), coated tablets of 100 mg.

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". . . reports on its use in patients with pneumococcal pneumonia, surgical infections, or urinary tract infections indicate that the oral administration of tetracycline is followed by rapid clinical response. **Symptoms, including fever, largely cleared up within 24 to 48 hours."**[1]

1. English, A. R.; P'an, S. Y.; McBride, T. J.; Gardocki, J. F.; Van Halsema, G., and Wright, W. A.: Antibiotics Annual (1953-1954), New York, Medical Encyclopedia, Inc., 1953, p. 70.
2. Finland, M.: Brit. M. J. 2:4846 (Nov. 21) 1953.

BASIC chemically

The structure of this ***newest*** antibiotic represents a nucleus of modern broad-spectrum antibiotic activity.

BASIC clinically

This ***newest*** broad-spectrum antibiotic has a wide range of action against respiratory, gastrointestinal, soft-tissue, urinary and mixed bacterial infections due to pneumococci, streptococci, staphylococci and other gram-positive and gram-negative organisms.

"Data thus far available would indicate that the use of tetracycline is accompanied by a significantly lower incidence of gastrointestinal symptoms . . ."[2]

This ***newest*** broad-spectrum antibiotic may often be used with good success in patients in whom resistance or sensitivity to other forms of antibiotic therapy has developed.

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brand of TETRACYCLINE hydrochloride

BASIC among broad-spectrum antibiotics

supplied:

TETRACYN TABLETS (sugar coated)
250 mg., 100 mg., 50 mg.

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A.M.A. Washington Letter

THE MONTH IN WASHINGTON

Some parts of the Eisenhower administration's broad health program are making good progress on Capitol Hill, while others are virtually standing still or bogged down in the technical complications that are always a threat to new legislation. Well ahead of the other proposals, and possibly destined for enactment, are bills to broaden the scope of the Hill-Burton hospital construction law and to liberalize income tax deductions for medical expenses.

The House Interstate and Foreign Commerce Committee, under chairmanship of Rep. Charles Wolverton (R., N. J.), wound up its long fact-finding study of voluntary health insurance plans and immediately started hearings on the Hill-Burton changes. The purpose is to amend the Hill-Burton law so that it can be used to disburse federal grants to states for construction of health facilities that do not qualify as "hospitals." The administration is anxious to stimulate the building of more nursing homes, hospitals for the chronically ill, diagnostic or treatment centers and rehabilitation facilities.

An initial appropriation of $2 million would be authorized for surveys and planning, and $60 million annually for three years of construction. Per capita income as well as population would be used to determine a state's share, as under the present Hill-Burton program.

At the House hearing, crowded into two days, the construction program was indorsed at least in principle by every witness, except the representative of the American Association of Nursing Homes. Because the program is limited to nonprofit sponsors, members of this group could not receive grants. Their spokesman said long-term loans through the Small Business Administration would help solve their problem.

American Medical Association recommended passage of the bill, but urged that facilities for the chronically ill and the handicapped be "part of or near a conventional hospital," and that facilities of all types be open to the entire community without discrimination, as in the present Hill-Burton law. (It is likely hearings also will be held on this legislation in the Senate.)

The House Ways and Means Committee, meanwhile, was giving its approval to a new income tax provision that would allow the deduction of medical expenses if they exceed 3 per cent of adjusted gross income, rather than 5 per cent under present law. The present maximum limitation would be doubled, and the deduction of travel expenses allowed where travel is prescribed by a physician. These changes—a long-time AMA goal—are embodied in the omnibus tax readjustment bill.

President Eisenhower's proposal for federal reinsurance of voluntary health plans has not been able to follow the steady course on which it first appeared to be embarked. At the House hearings, none of the spokesmen for the large organizations in the health fields—AMA, Blue Cross and Shield, American Hospital Association—was willing to indorse the plan. Like the AMA spokesmen, most of them wanted first to examine the actual administration bill, which at that time had not been introduced. From the Blue Cross, however, came a suggestion that the idea be tried out experimentally.

Spokesmen for national labor organizations expressed mixed reactions, with some maintaining that reinsurance was a poor substitute for what they believe the country really needs—national compulsory health insurance.

The administration's health budget for the next fiscal year, starting next July 1, calls for a slight overall reduction. The regular Hill-Burton program, currently operating on $65 million, would get $50 million (any appropriation to start the proposed expanded construction would be in addition). Relatively sharp reductions would be made in funds for venereal, tuberculosis and communicable disease control, in line with the policy of shifting this responsibility to the states. The various research institutes would receive about what they are now spending.

One of the few new items is for $7.8 million, estimated as necessary for the extra cost of enlarging the federal program of vocational rehabilitation. Legislation authorizing the expansion is awaiting Congressional action. The administration hopes gradually to increase the number of persons rehabilitated annually from the current 60,000 to 200,000. While the program is being stepped up, one of its goals would be to induce states to increase their spending until eventually their appropriations match the federal. Like most of the President's health program, the rehabilitation effort has the support of the AMA.

Conferences between AMA officials and administration leaders are continuing. Latest sessions were with Secretary Hobby, concerning her department's legislative plans; with VA Administrator

(Continued on Page 279)



How to control itching and scaling for **1** *to* **4** *weeks*

You can expect results like these with SELSUN: complete control in 81 to 87 per cent of all seborrheic dermatitis cases, and in 92 to 95 per cent of common dandruff cases. SELSUN keeps the scalp free of scales for *one to four weeks*—relieves itching and burning after only two or three applications.

Your patients just add SELSUN to their regular hair-washing routine. No messy ointments . . . no bedtime rituals . . . no disagreeable odors. SELSUN leaves the hair and scalp clean and easy to manage.

Available in 4-fluidounce bottles, SELSUN is ethically promoted and dispensed only on your prescription. Abbott

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SELSUN®

Sulfide Suspension

(*Selenium Sulfide, Abbott*)

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

1-82-54

PR REPORT

LEGISLATIVE ACTIVITY during the early months of each year requires considerable PR staff time, 1954 is no exception. Of the 717 bills introduced in Michigan's two houses this year, a surprisingly large percentage were directly related to the practice of medicine, or to the physical health and welfare of Michigan's citizens. Once again activities are being directed by the MSMS Legislative Committee, under the chairmanship of L. A. Drolett, M.D., of Lansing.

In spite of the Legislature, field secretaries have been able to maintain their contacts around the state. Particular emphasis has been put on radio and the placement of new, high-quality AMA programs with co-operation of county medical societies. Recently AMA has transcribed twelve different series of fifteen-minute shows, each series running for thirteen weeks.

OF MICHIGAN'S SIXTY RADIO STATIONS, eight scattered in strategic locations throughout the state signed up for the programs immediately; it appears that close to 50 per cent may be using the popular AMA series by summer.

Special promotional materials have been prepared by MSMS and are available to county societies sponsoring radio broadcasts. County public relations chairmen interested in placing a series with a local station may write the MSMS PR Department in Lansing. It's the easy way to sponsor local radio activity—and radio is still a great educational force, TV notwithstanding.

THE AMA RADIO PROGRAMS ARE WELL BUILT for listener interest. Here are the titles of the twelve new thirteen-week series:

1. Drugs You Use.
2. Everyday Health Problems
3. Doctors Make History
4. Story of Surgery
5. Before the Doctor Comes
6. Why Do You Worry?
7. Medicine Fights the Killers
8. Keeping Your Baby Well
9. Hi-Forum (Teen-Age Problems)
10. Gold Medal Doctors
11. The Best Is Yet To Come
12. Living Proof

DEDICATION OF THE BEAUMONT MEMORIAL on Mackinac Island July 17 should be a banner PR medium for MSMS. An outline of PR aspects, including wide news coverage both in Michigan and nationally, has been drawn up. Emphasis will be on medical progress since Dr. Beaumont's day, particularly in the field in which his experiments are the foundation. The PR staff and committee are working closely with the Beaumont Memorial Committee headed by Otto O. Beck, M.D., of Birmingham, in making the detailed plans.

AMONG THE STIMULATING PORTIONS of the 1954 Annual County Secretaries-Public Relations Conference—other than the thought-provoking skits which stole the show this year—was the talk on "Deskside PR of the Physician" by John F. Conlin, M.D., Director of Medical Information and Education for the Massachusetts Medical Society. Dr. Conlin's unusual syntax and diction give him a distinctive speaking style which commanded interest. Here are some excerpts:

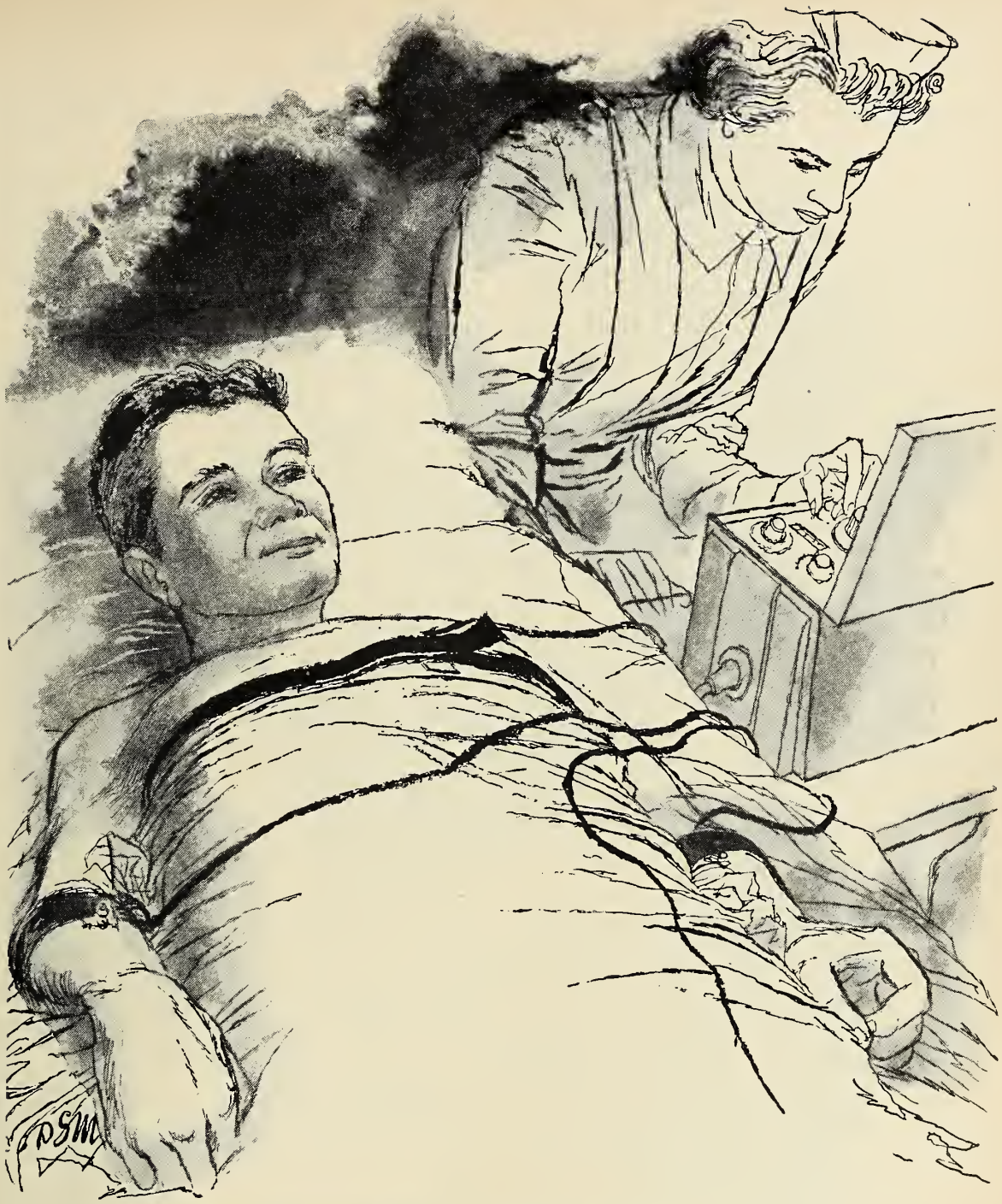
"Promptness is a most desirable virtue . . . The physician who is habitually prompt, who schedules his appointments, who is considerate of the crowded schedules of many of his patients, who gives his patients the courtesy of an explanation when he is of necessity delayed—this physician has laid a good foundation for building good will . . ."

"The busy physician rightly places a high value on his time . . . yet one of the frequent patient queries—'what has happened to the good old family doctor'—is a reflection of our frequent failure to ask a few friendly questions . . . or to reply with patience to requests for advice within our sphere of competence . . ."

"There is certainly a great need for more participation by individual physicians in the educational process toward better understanding of health, social medicine, and even 'political medicine' by the public . . . It must not be forgotten that 'doctor' literally means 'teacher' . . ."

"It is necessary to point out that the objectives of medical organization on behalf of the public are in essence the objectives of the physician for the welfare of his patient . . ."

THE 1954 MICHIGAN CLINICAL INSTITUTE was assured of excellent coverage and interpretation for the public well in advance. Early in February, as a part of MCI public relations activity, appearances had been arranged during the three-day session for doctors of medicine before five Detroit area service clubs and over ten radio and television stations. Details of news coverage were planned weeks before the institute. As for advance news, a variety of releases were prepared and placed with daily and weekly newspapers and radio stations throughout Michigan, as well as with state medical journals and county society bulletins in Michigan, Indiana, Illinois, Ohio, Wisconsin and Ontario.



If the symptom-complex seems to indicate that the patient is "caffein-sensitive," he need not give up coffee. He need only give up drinking caffein. As you know, Sanka Coffee is 97% caffein-free.

P. S. Doctor, you ought to try Sanka Coffee yourself. It is wonderful coffee with a fine aroma and flavor.



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AMA News Notes

ON TO CALIFORNIA!

"Go West, young man . . ." is as up-to-date a piece of advice today as it was in Horace Greeley's time. More than 11,000 physicians from all parts of the country are expected to heed this counsel by attending the AMA's 103rd Annual Meeting, June 21-25, in San Francisco. This year's scientific program offers physicians an opportunity to see and hear about the newest developments in medicine.

All scientific and technical features will be located in the convenient Civic Center—with both the Scientific and Technical Exhibitions in the Civic Auditorium. The Scientific Exhibit, presenting more than 200 displays of new treatments and techniques, will provide plenty of opportunity for discussion of individual problems with the demonstrators. More than 350 commercial exhibits, including presentations by leading drug, supply and publishing firms, will make up the Technical Exhibit in the Auditorium and adjoining large Portico.

General scientific sessions will be held in the High School of Commerce Auditorium. Scientific section meetings and motion picture films will be held in the Masonic Temple, High School of Commerce, War Memorial Veterans Auditorium, California Hall and other buildings adjacent to Civic Center. The House of Delegates will convene at the Palace Hotel.

You should make arrangements now to attend. Watch for further details in the Journal of the AMA.

MD'S NEVER STOP STUDYING

In these busy times the average practicing physician still manages to devote the equivalent of 83.3 eight-hour days a year to keeping abreast of current developments in the field of medicine. This striking figure is one of many brought out in a preliminary report by the AMA's Council on Medical Education and Hospitals on its recent survey of postgraduate medical education. Survey findings are based on data compiled on personal visits to more than 220 institutions engaged in postgraduate medical education as well as 5,000 questionnaires received from a random sample of 17,000 practicing physicians throughout the country.

Not only are more opportunities for postgraduate medical education being offered today than ever before, but more doctors are taking advantage of these opportunities, the report indicates. Over 41,000 practicing physicians took some form of postgraduate medical course last year (this figure excludes all "graduate" courses formerly considered "postgraduate").

Ways in which the doctor keeps up-to-date on medical matters are divided into five categories: (1) Medical reading; (2) professional contacts with colleagues, consultants, et cetera; (3) hospital staff meetings; (4) attendance and participation in medical society and specialty group meetings at the local, state and national level, and (5) postgraduate courses conducted by some 26 different types of organizations such as medical schools, health departments, medical societies, hospitals, et cetera. Physicians responding to the questionnaire indicated that about one-third of the time spent in continuing their education is devoted to medical reading, another one-third to professional contacts and the remaining one-third divided among the other three forms.

Other highlights of the preliminary report: Some form—though varied—of organized postgraduate medical course is being offered in every state in the country . . . Ninety per cent of these postgraduate courses are offered in the larger cities . . . Chief reasons noted for not taking postgraduate courses is lack of someone to care for patients while the doctor is away and the multiplicity of medical society and hospital staff meetings . . . More than 93 per cent of the responding physicians felt that the maximum amount of time they could be away from practice was under 15 days . . . It cost the average physician surveyed in this study approximately $350 per year to attend postgraduate courses alone, without including the other four forms mentioned above . . .

It is expected that the final report on the survey will be ready about the middle of the year.

CHAPTER ADDED TO SAMA ROSTER

Growing by leaps and bounds since its formation only three years ago, the Student American Medical Association now boasts 65 chapters throughout the country. Newest affiliate is at Georgetown University School of Medicine, Washington, D. C. Several other schools are organizing chapters before the SAMA 4th Convention, May 1-3 in Chicago. At the present time, however, the following medical schools are without representation—Stanford, Howard, George Washington, Johns Hopkins, Harvard, Columbia, Rochester, New York Medical, Cornell, South Carolina, Tennessee, Vanderbilt, Vermont, St. Louis, Washington and Dartmouth.

Although SAMA's officers and staff are devoting their greatest efforts toward development of programs at the local and national levels, they welcome the opportunity to explain the background and purposes of the organization to students at non-affiliated schools. Other information relative to non-chapter schools from alumni and other interested persons should be directed to the SAMA executive offices at 535 North Dearborn Street, Chicago.

LAUNCH GROUP PRACTICE STUDY

Interest in group practice has been on the upswing in the United States since World War II. However, since very little information is available on the subject, the AMA has authorized a study of the entire question of group practice to be undertaken jointly by the Council on Medical Service and the American Association of

(Continued on Page 258)



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Hospital Service Plan

The Community Chest of Battle Creek has established what it considers a pioneering move in service. Ever since the organization of the original Welfare Fund, one or both of the hospitals have been listed for rather large amounts of money to be used in caring for indigent persons who were not the responsibility of any existing relief agency, other than the overworked Public Social Service Bureau which did not assume all of its legal obligations. This money ultimately degenerated into a fund used by the hospitals to cancel off accounts which they could not collect in any other way. This was very unsatisfactory.

Plans have been brewing for several years. The Chest visioned a service worker, available to all of the hospitals especially, and to the doctors incidentally, who could find help, if it was available, for these indigents or medical indigents. A fund was raised in the campaign two years ago, and an attempt was made to have the Chest officially act as the administrators.

Early in 1953, a committee was founded with authority to establish the Hospital Service Plan and engage an administrator. The committee was fortunate in securing Mrs. Paul Tammi, a woman of remarkable understanding—and not a social worker. She grasped the viewpoint of the Chest and has been a very satisfactory contact officer in all sorts of problems.

Patients coming to the hospitals with no resource and no sponsor are referred to her. Most of their problems can be solved and some benefits secured from special sources which she knows of and can contact. If the problem patients are referred to her before entering the hospital the problem is much easier. Most of the doctors in Battle Creek have learned to call her when dealing with this problem group. She contacts the welfare department, the County and State Social Welfare Committees for Veterans, the Veterans Administration, church groups, personnel departments of factories, unions, and also relatives of ill persons. When these contacts are made before entering the hospital, some help is usually forthcoming.

Mrs. Tammi's service started in April, 1953, and during the first eight months she has administered and closed 273 cases. She reported sixty-eight sources of referral in caring for these patients. During this period, she has been able to secure pay for these patients of over $25,000 which otherwise would have been a complete loss. But this is the least item. Personnel workers, union workers, industry, church groups, are now seeing a service benefit which has improved the morale of the patients cared for.

The Service is growing in its scope and has received many letters of commendation. This is a service large hospitals could and sometimes do render, but a city the size of Battle Creek could not possibly afford. There is no record of any such Service in any other community.

One favorable feature of the plan's success is that it has a small amount of money for the executive's salary and transportation, but no money whatever to use for relief.

AMA NEWS NOTES

(Continued from Page 256)

Medical Clinics. The proposed field project, employing personal interviews rather than questionnaires, will seek to answer many of the questions concerning the organization and operation of group practice clinics which continually are directed to the AMA. Although no schedule has been set. it is hoped that the study will be completed by early fall.

SURGE OF REQUESTS FOR PLACEMENT AID

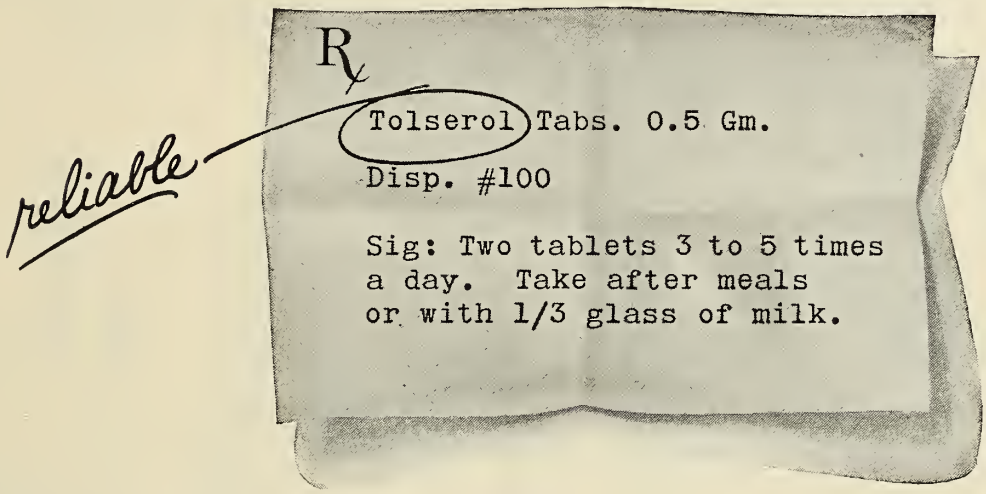
More physicians are utilizing the services offered by the AMA Physicians Placement Service than ever before, reports the Council on Medical Service. A brief look at the number of services rendered by the Placement Service during the last three months of 1953 as compared with the same period of 1952 shows: (1) A 95 per cent increase in the number of requests from communities seeking physicians; (2) A 130 per cent increase in the number of letters of inquiry from physicians seeking places to locate; (3) A 364 per cent increase in the number of physician visits and personal interviews in the AMA office. This Service operates in close cooperation with the 43 state physician placement services.

Approximately 90 per cent positive correlation can be anticipated from the examination of the stained urinary sediment in patients with renal pelvic cancers.

* * *

Microscopic hematuria occurs in about 75 per cent of patients with renal adenocarcinomas.

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Gastrointestinal disturbances rare. *Pediatric* ERYTHROCIN is specific in action—*less likely to alter normal intestinal flora than most other antibiotics.* No serious side effects reported.

Pediatric ERYTHROCIN comes in 2-fluidounce, pour-lip bottles. *No mixing required.* Can be administered before, after or with meals. Prescribe *Pediatric* ERYTHROCIN. Abbott

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100 mg. of ERYTHROCIN
25-lb. child—½ teaspoonful
50-lb. child—1 teaspoonful
100-lb. child—2 teaspoonfuls
Every 4 to 6 hours

Michigan State Board of Registration in Medicine

The following Doctors of Medicine have received licenses to practice medicine in Michigan from October 17, 1953, until December 31, 1953, being numbers 20,564 to 20,617.

Lyons, Henry B., '95	Chattanooga, Tennessee	Meharry Med. Co.	Endorse. Missouri
Robarge, Ignace J., Jr., '19	Bolton, Michigan	U. Michigan	Exam. Ann Arbor
Glenny, Christopher C., '24	Manchester, Connecticut	Tufts Med. School	Nat'l Board Special
Meyer, Kenneth R., '25	Flushing, New York	U. Pennsylvania	Exam.
Bradhamm, Robert R., '24	Sumter, South Carolina	U. So. Carolina	Exam.
Dent, Robert E., '24	Birmingham, Alabama	U. Louisville	Endorse.
Storer, William R., '10	Marion County, Indiana	U. Indiana	Endorse.
Butterfield, Paul Wm., '09	Wilton, Maine	U. Boston	Nat'l Board Special
Ostrowski, Arthur Z., '27	Detroit, Michigan	U. St. Louis	Endorse.
Sutton, Charles F., '03	Jackson Center, Ohio	U. Chicago	Endorse.
Balofsky, Samuel L., '09	Brooklyn, New York	U. Tulane	Endorse.
London, Sol, '17	New York City, New York	U. Louisville	Endorse.
Low, Lyman R., '23	Irene, South Dakota	Temple U.	Endorse.
Polich, John J., '23	Dallas City, Iowa	U. Iowa	Endorse.
Kleaveland, Ingram J., '24	Sioux City, Iowa	Western Reserve	Endorse.
Wiley, Philys K., '24	Lafayette, Indiana	Northwestern U.	Endorse.
Allott, Hugh R., '25	Newburgh, New York	New York U.	Nat'l Board Exam.
Greenleaf, Ellen C., '28	New York City, New York	Columbia U.	Nat'l Board Exam.
Olson, Clarence W., '03	Indianapolis, Indiana	U. Michigan	Exam.
McGuire, John F., '21	Providence, Rhode Island	Georgetown U.	Endorse.
Fellman, Sheldon L., '27	Detroit, Michigan	U. Michigan	Exam.
Combs, Robert G., '18	Straughn, Indiana	U. Cincinnati	Endorse.
Levenson, Malcolm L., '18	Detroit, Michigan	U. Michigan	Exam.
Evans, Gomer P., Jr., '23	Pittsburgh, Pennsylvania	U. Pittsburgh	Endorse.
Umiker, William O., '16	Buffalo, New York	U. Buffalo	Nat'l Board Exem.
Clinkston, Philip, '17	Saginaw, Michigan	George Washington	Nat'l Board Exem.
Folson, John D., '19	Lincoln, Nebraska	U. Chicago	Spec. Exam.
Mattson, Roger P., '24	New Rockford, N. Dakota	U. Illinois	Endorse.
Melick, Richard C., '21	Eureka, Illinois	U. St. Louis	Endorse.
Carter, Laura J., '24	Stuart, Iowa	U. Iowa	Endorse.
Olejniczak, Stanley '16	Detroit, Michigan	Med. Academy, Cracow, Poland	Exam. Endorse.
Stewart, Marjorie R., '25	Covington, Kentucky	U. Cincinnati	Exam.
Lusk, John A., '27	Detroit, Michigan	U. West, Ont.	Endorse.
Cooke, Weldon J., '26	California	Northwestern U.	Endorse.
Gustin, Ralph D., '13	Lynden, Washington	Evangelists	Exam.
Suen, Irene T. S., '28	Foochow, Fukien, China	Women's Christian Ned., China	Exam. Examin.
Berlacher, Franz J., Jr., '28	Toledo, Ohio	U. Chicago	Examin.
Cameron, Hugh A., '26	Detroit, Michigan	U. Mich.	Examin.
Harrell, Frank G., '23	Detroit, Michigan	Evangelists	Examin.
Evans, Douglas M., '25	Vandergreft, Pennsylvania	Western Reserve	Endorse.
Kavanaugh, John W., '24	Kalamazoo, Michigan	Stritch Med. School	Examin.
Dodson, Vernon N., '23	Benton Harbor, Michigan	U. Marquette	Nat'l Bd.
Somerville, William, '24	Detroit, Michigan	U. Tennessee	Examin.
Park, Charles W., '20	New Cumberland, Ohio	Duke U.	Examin.
Lanman, John U., '26	Hammond, Indiana	Cornell U.	Examin.
Paulson, Charles A., '24	Portland, Oregon	U. Oregon	Examin.
Pifer, Paul D., '24	Punxsutawney, Pa.	U. Pittsburgh	Examin.
Pugh, George B., '24	Ellwood, Pennsylvania	Cornell U.	Endorse.
Wolever, Thomas H. S., '20	Orin, Wyoming	Syracuse U.	Endorse.
Kodrak, Heinrick, '05	Berlin, Germany	Ludwig-Maximilian U., Germany	Endorse. Nat'l Bd.
Kane, Elizabeth D., '99	Kane, Pennsylvania	Loyola U.	Examin.
Keeler, William H., III, '28	Greensburg, Pennsylvania	Temple U.	Endorse.
Grins, Antonio, '03	Barcelona, Spain	U. Barcelona	Nat'l Bd.
Hafford, Robert C., '27	Albion, Michigan	Cornell U.	Examin.

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wide distribution

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excellent toleration — Widely used among patients of all ages, this tested broad-spectrum antibiotic is well tolerated.[5,6]

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(Erythromycin, Lilly)

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Pediatric

100 mg. of 'Ilotycin' (as the ethyl carbonate) per teaspoonful (5 cc.)

AVERAGE DOSE:

Thirty-pound child: One teaspoonful every six hours.

Adults: Two teaspoonfuls every four hours.

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The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

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Medical Services of the Michigan Epilepsy Center

By Raymond D. Dennerll, Executive Director
Detroit, Michigan

THE PHILOSOPHY behind the plan of the Michigan Epilepsy Center evolved over the six years of its operation and is based mainly on three major principles.

Theory of Practice

The first principle is total study of the whole convulsive person, utilizing and integrating all of the resources of neurology, neurosurgery, internal medicine, endocrinology, physiology, psychiatry, clinical psychology and electroencephalography for a cross sectional and longitudinal evaluation of his *entire problem.*

The second principle is to provide the convulsive patient and his personal physician with this kind of integrated study when the physician wants the findings and recommendations that result from a psychosomatic approach[1] in continued work with the patient.

The third general principle is to do everything possible to initiate, stimulate and co-ordinate research in the convulsive disorders conducted either by the Center or by any professional people in Michigan. All of the individual and group attempts to search out specific facets of the convulsing person, when integrated, should provide a constantly increasing understanding of the complex interplay of physical and emotional factors which lead to and perpetuate the convulsive disorder.

Doctor-Patient Relationship.—The Center staff believes that one of its most vital functions is the strengthening of the physician-patient relationship since it regards the prolonged treatment inevitable in this illness as being most effectively handled through close and continuing physician-patient co-operation. We believe the personal physician is the most logical person to carry out the general medical program, advise and counsel the patient and his family, and help the patient to secure special treatment, such as psychotherapy, vocational rehabilitation, or additional medical care, where needed.

The Michigan Epilepsy Center, then, serves the epileptic patient by acting as the personal physician's temporary representative to provide a psychosomatic approach to the patient's individual problem, whether it be physical, emotional, social, or all three.

Experience has shown that even when the only apparent problem in treatment has been difficulty in achieving control of seizures, more often than not, emotional and/or social factors may be found, under this kind of investigation, to contribute greatly to the ineffectiveness of medication alone. Conversely, it sometimes happens that when on the surface the main problem appears to be largely emotional or social, a psychosomatic investigation might indicate that a severe neurological condition may be contributing to the emotional or social maladjustment.

The Center believes, therefore, that it can most effectively help the patient and his physician by determining the extent and nature of our investigation of each patient's problem after preliminary examination of the total situation. Consequently, we do not accept referrals to our Detroit Center for specific aspects of our investigation facilities, such as for an electroencephalogram or for psychological testing, or for neurological examination.

Referrals to the Center.—We do accept referral of any patient for psychosomatic evaluation who presents a specific problem in medical manage-

ment, whether it be diagnostic, poor seizure control, emotional or social maladjustment, or all of these. Although in many cases we have found it necessary to bring all of our facilities to bear upon the particular problem, in some cases a more limited study program might be indicated.

Referrals to the Center for psychosomatic evaluation should be made by the physician only in instances where he intends to utilize the recommendations and findings that result from our investigation in his continued medical management of the case. If the physician does not wish to continue handling a particular case, we can, if the physician wishes, attempt to secure for a patient other outside medical care, but we do not provide treatment facilities except on a limited research basis. In accepting a patient for study, the Center agrees to assist the physician in carrying out any recommendations made, and the Center welcomes the use of our team for continuing periodic consultation or re-evaluation, whenever needed in the management of the case. We are naturally interested in following the patients we study over a long period of time.

Method of Operation

The Center's clinical program is twofold. One aspect is conducted at the permanent offices at 96 West Ferry in Detroit. The other aspect is our statewide mobile consultation service to epileptics and their physicians, more limited in scope, at the present time, than the consultation done at Detroit.

Detroit Clinical Program.—Patients are eligible for service from anywhere in Michigan. All of the services are on an outpatient basis, as there are at present no facilities at the Center for inpatient study. No patient is accepted for study without the approval of his physician, who agrees to continue subsequent treatment and management responsibility. Consequently, patients who do not intend to continue with their present physician, or patients whose physician does not intend to continue treating for some reason, do not make good referrals for full study. The Center can function effectively as a consultation resource only where the patient and the physician intend to work closely and co-operatively together and in close reciprocity with the Center over an extended period of time.

Referrals are initially screened by the social worker through discussions with the patient or his family and the physician. Before the patient is accepted for complete study, the physician is asked to furnish the Center with a complete report of his treatment efforts and results, and also detailed results of routine laboratory tests, complete blood count, blood serology, urinalysis, and basal metabolic rate if possible, which we ask that each patient have done before study is begun.

A complete background history, both medical and psychological, is taken by the social worker and an appropriate fee for the evaluation is arrived at through discussion. A very flexible fee system was instituted in July, 1952. It defrays only about 5 per cent of the operating clinical budget, but the fee-setting discussions have provided increased understanding of each person's attitude toward accepting personal responsibility for his own welfare. Having each study patient pay an appropriate fee is one step in the direction of encouraging patients to follow through more conscientiously with their physicians on the recommendations which result from the study. Naturally, no person is refused study because of inability to pay a fee.

If a full study is decided upon, appointments are scheduled for neurological examination, several electroencephalograph studies, and additional diagnostic laboratory tests. The patient is seen by the psychiatrist who makes a clinical evaluation of the personality and its effect upon the person's difficulties. The psychologist administers a carefully chosen battery of tests including intelligence and projective personality techniques. If a child, the patient is seen by our pediatrician, and where indicated any patient may be seen by other specialists such as an endocrinologist or an allergist.

Upon completion of our full study, which generally extends over a period of from four to six weeks, a staff conference which includes the referring physician is arranged. The total findings are reviewed and attempts are made to integrate the separate studies into a whole picture. Recommendations are then made in any area where the patient may require or benefit from treatment or further study. The physician is encouraged to contact the Center any time for consultation about problems he may encounter in carrying out recommendations.

Aside from the value of the medical study itself, there are often secondary gains for the patient in the course of Center contacts. Interviews provide opportunity for personal counseling. They give the parents and marriage partners a chance to air their

concerns and gain new viewpoints about the meaning of epilepsy to the patient.

Statewide Clinical Program.—The second aspect of our clinical program is our statewide mobile consultation service. Since 1951, the Center has conducted a ten weeks' summer program offering service to physicians for their epileptic patients through their county medical societies. This service consists of electroencephalograms rendered by a mobile unit followed by neurological clinics for patients for whom this has been requested.*

The mobile program has been well received thus far, but ways to make it more complete, increase its efficiency and extend its scope are constantly being sought and improvements added as financial and staff resources permit.

The Center maintains close liaison with committees of the Wayne County and Michigan State Medical Societies, and the Michigan Society of Neurology and Psychiatry. Our financial support comes largely from the United Health and Welfare Fund, with a grant from Michigan Department of Mental Health equal to about 8 per cent of the total budget.

Evaluation of Center Service

In the latter part of 1952, questionnaires were sent to doctors who had referred patients for study, so that 1, Center service might be evaluated, and 2, new ideas might be gained for restructuring policy or procedure. Questionnaires were sent to ninety-six doctors covering 128 patients who had undergone complete study along the lines of our current procedure. These patients consisted of both children and adults of both sexes. Consequently, this investigation principally covered patients studied during 1950, 1951 and part of 1952. A gratifying reply of 92 per cent was received, or eighty-nine doctors covering 113 patients.

In brief, the results indicated that the majority of physicians referred their patients to the Center because of the need to obtain evaluation *in more than one area,* such as diagnosis, psychological evaluation, assistance with a social problem, medication recommendations, and laboratory studies. In fact, 35 per cent of the referrals were made for at least four of ten possible reasons.

The doctors report that the Center met their needs in 73 per cent and partly in 20 per cent of the cases. A large majority of patients (85 per cent) continued with their doctors after the study.

One-half of the doctors report their relationship with the patient improved after their Center contacts, 5 per cent report it became worse, 45 per cent report it remained the same.

Fifty-three per cent of the patients improved in regard to seizures and/or social adjustment through the use of Center recommendations, 12 per cent improved through the use of the findings alone, and 12 per cent through subsequent developments.

Conclusions of Service Evaluation.—This evaluation of past services provides substantial evidence that the Center's approach to epilepsy, the use of the psychosomatic approach, results in definite benefits to the physician and his epileptic patient. It permits the physician, through Center facilities, to view his patient as a total person, rather than routinely from the standpoint of the symptom—the seizures, and it enables him to give the patient needed assistance in all areas. Evaluation and treatment of the whole person rather than simply the symptom of seizures actually resulted in improvement of seizure control over and above what had been achieved through the use of medication alone. In addition, it can result in mental health benefits in an illness where personality and social complications frequently make medical management difficult.

Summary

The results shown to date in this pilot group of patients studied by a multiple approach suggest the need for extension of this approach so that more epileptics, through their physicians, might secure its benefits. Extension of the multiple approach might come in the future through increased financial support of the Center and through future absorption by physicians of Center methods. The Center hopes to publish in the very near future a series of articles explaining how each physician can utilize a routine multiple approach in his own practice, when referral to the Center is not feasible.

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*A more detailed description of this aspect of our clinical program has been written in a separate article.[2]

Value of the EEG for the Doctor of Medicine

By A. J. Derbyshire, Ph.D.
Detroit, Michigan

AN EARLIER paper described the use of an electroencephalographic (EEG) laboratory as one unit of the state program of the Michigan Epilepsy Center. This article discusses, (1) the basic principles in interpretation of EEGs used at the Michigan Epilepsy Center and (2) how effective use can be made of the EEG by the doctor of medicine.

EEG Technique

As the EKG records from the skin of arms and legs the electrical changes of the heart muscle, so in similar fashion, the EEG records from the scalp the electrical changes of the brain with respect to time.[1,4] The electric pattern from each electrode is the result of the average electric charge on all the nerve cells of the underlying brain in an area at least three cm. broad. From a predetermined pattern of electrode placement and a schedule of electrode combinations for recording, the amplitude, quantity and distribution of any brain wave frequency can be obtained.

What an EEG Is

The recorded EEG pattern is a measurement of the physiologic aspect of cerebral activity. It measures a certain collective or social aspect of the function of the nerve cells, one aspect of their integrative altogetherness. This beating of nerve cells has two origins. One lies in the physical biochemistry of each nerve cell and the other in the varied functional interrelationships of each nerve cell with every other nerve cell, with the matrix itself and as a member of the total society of cells. The fact that such a record could have a useful clinical correlation is amazing. Yet, such a correlation does exist and it is useful.

The EEG Tracing

There are a number of EEG patterns composed of particular frequencies with particular voltage ranges and distributions which have good correlation with known states of cerebral function. These are: (1) hyperalertness, (2) alertness, (3) repose[3,4] (4) sleep,[2] (5) delirium,[5] (6) convulsion.[6]

During the time of making an EEG, the states of cerebral functioning as observed are correlated in time to the EEG pattern. The more widely varied the cerebral states seen, the more knowledge is gained about the cerebral physiology. Alertness and repose are almost always possible. Sleep can be very useful because seizure discharges in the EEG are often more common here than in repose. Activation is useful and any type from hyperventilation to subconvulsive doses of Metrazol have been used.

Rating the EEG

The most normal EEG records have the expected correlation between the observable state of patient with the EEG patterns. Within each cerebral state, there are no wide EEG variations and there are no abnormal EEG states without sufficient external cause (rated 1 and 2). Wide variations of EEG pattern with a steady observable state makes a record unstable (rating 3). The presence of hyperalertness, delirium or convulsive EEG patterns regardless of clinical state makes the record abnormal (rating 4 and 5). If any one of the abnormal EEG states occurs locally, this leads to concepts of a focal physiologic disturbance.

Interpretation

The clinical problem is to deduce from these correlations their meaning in terms of medicine. Here the probabilities become much less reliable. In fact for any one EEG pattern, several medical possibilities usually exist. The EEG report to the referring doctor attempts to point out the most likely one or ones and give some indication of probable correctness or reliability. For example, in patient A, there is a high voltage irregular 1.5 to 3.5 per second activity appearing over the left hemisphere rather constantly and slowest in beat in left frontal area. This implies some diffuse delirium and in the left frontal zone a maximum of this trend. What would cause such a physiologic depression, correlating with a patient who is confused, and complaining of headaches during the test but a local pathologic process within or near the cortex. Most probable is a space occupying lesion, but an oligodendroglioma is as likely as a brain abscess. Only rarely in such instance is there no pathology and a gradual recession of the 1.5 to 3.5 per second activity without further symptom.

If in patient B these same waves would appear

bilaterally in frontal areas with less frequency variation and in bursts, locked at three waves per second, and if there were no slowing of basic record, then this pattern probably means a convulsive disorder, with less probability a deep-seated mid-saggital local lesion of the frontal areas such as a space occupying lesion or area of brain damage. It is the clinician's job to fit these probabilities into the medical picture and act accordingly. Doctors of medicine who are experienced in neurologic diseases and who have used EEG reports and are aware of the problems in making the transition from physiology to medicine may interpret with confidence.

Uses of EEG

For the doctor of medicine without experience, the EEG offers help in areas of pre-diagnostic and post-diagnostic study of his patient. It is useful in the early detection of marked physiologic instability and trends for convulsive states in pre-convulsive disorders. In post-diagnostic care of the epileptic person, EEGs give a picture of the physiologic status, its improvement or deterioration, and its changes with treatment. The EEG may help to determine changes in the physiologic convulsive tendency in the presence of particular states, such as alertness or sleep, flickering lights, drum beats, diets and any individual situation of a particular patient, et cetera. Many times these are short cuts to more efficient care of the convulsive person besides being a continual check for the unsuspected expanding lesion. Sometimes the EEG may show greater disturbance than evidenced clinically. These people should be watched carefully as they can change suddenly. Recently, the EEG is being used to study patients with episodal symptoms that are not epileptic. Some are yielding results.

The electrical form of the hypersynchronous seizure discharge gives clues as to whether or not this is of spike and dome, high voltage fast or 4 to 6 per second electrical form. For each of these electrical forms, there are tendencies for certain medications to be most effective. These may be helpful clues in people with seizures which are difficult to control.

Following any major infections, toxic or traumatic experience to the brain, a series of EEG patterns reveal the process of physiologic reorganization. Early detection of distorted or incomplete recovery by EEG aids in early treatment and may predict the developing trend for seizures.

Conclusion

Little has been said about the EEG for diagnosis as this is a minor rôle for the EEG. No laboratory process or gadget could replace the trained human mind in its function of diagnosis. The EEG, however, when asked to describe the physiologic status of a patient, may yield data for the referring physician which are important and which cannot be measured in any other way.

What we are all learning is what is brain physiology and what should be known about it in the convulsive person and what questions can be answered by the EEG. In the meanwhile, the convulsive person improves because we are interested in him.

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BACKING INTO SOCIALIZED MEDICINE

Howard Buffett, who retired last year from Congress where he served four terms as representative from the 2nd Nebraska District, has written an excellent article, entitled "Backing Into Socialized Medicine." It has been distributed in printed form at a nominal price (6 copies for $1) by Human Events, Inc., 1835 K Street, N.W., Washington, D. C.

Mr. Buffett has taken a new, up-to-date slant on the subject of socialized medicine which, he says, ought to be a dead issue in America, but isn't.

He believes we are edging towards socialized medicine, whether we want it or not.

"We are backing into it," he said, "by way of militarism."—*AMA Secretary's Letter.*

The Statewide Mobile Service of Michigan Epilepsy Center

By Z. Stephen Bohn, M.D.
Therese E. Kidder, M.S.S.A.
Detroit, Michigan

IN THE summer of 1953, an aluminum house trailer, guided by a blue pickup truck, rolled through the northwestern half of the lower peninsula of Michigan. Signs described it as a "Mobile Electroencephalograph*[2] Laboratory." At Reed City, Ludington, Manistee, Cadillac and Petoskey, the two technicians in charge stopped from one to two weeks at each place, serving sixty-eight epileptic patients who had been referred for brain wave tracings, by thirty-four out of eighty-two physicians offered the service.

Local county medical societies had welcomed the unit which had been provided by Michigan Epilepsy Center**[1] of Detroit, and financed by the United Health and Welfare Fund.

The brain wave records obtained at each stop, together with medical histories from referring physicians and social histories from patients' families, provided basic data for additional services of a neurologist who conducted a one-day clinic in four localities, examining patients particularly singled out for this by their physicians. To the doctors were then made available the neurologist's diagnostic and therapeutic impressions.

Factors Influencing Establishment of a Mobile Service

The mobile unit was launched in 1951 in response to an unmet need involving some 30,000 epileptics in Michigan—10,000 outside the greater Detroit area. Particular interest in the physical, emotional and social plight of these individuals, in techniques of studying and treating their symptom, in research into its causes has been the accepted responsibility of the Center; but it had not been at once clearly apparent by what means such interest might most effectively serve all the epileptics throughout Michigan. The permanent location of the Center in Detroit, its small staff and limited finances naturally circumscribed the effectiveness of the psychosomatic team primarily within a small area; and cost ruled out duplicating the exact nature of this facility in the broader statewide services.

The precise problems of Michigan communities outside Detroit in assisting their epileptic populations were not known. The scarcity of neurologists and psychiatrists outside major cities was noted and a survey of private EEG laboratories completed in 1950 disclosed no installations above the Bay City line at that time. Fourteen machines were available south of Bay City—seven of them in Detroit and four in Ann Arbor. There were few precedents in the country for epilepsy programs of any kind.

Existing resources and available finances for developing a service ultimately influenced the type of statewide program launched. The prime objective was to encourage the concept of considering convulsive disorder patients not from the point of view of their symptom alone, but from the psychosomatic framework of relating their symptom to their total emotional, physical and social well-being. Since a complete psychosomatic team could not be offered, the following program was adopted: (1) to offer services above Bay City where all facilities were not readily available, (2) to offer physicians for their patients the one specific, diagnostic laboratory measurement of most help in understanding the variations of the complex symptom and most identified with research, (3) to offer neurologic consultants and (4) to bring

*An electroencephalograph (EEG) is an instrument for recording from the surface of the scalp the electric currents given off by the brain. It is essentially like the EKG except it is more sensitive and records smaller electrical pulsations. Since it is a measure of the physiologic state (awake, asleep, or in a state of disturbed consciousness) of the nerve cells in the cerebral cortex, this record gives information about how some disease processes have affected this state. The EEG is useful in convulsive disorders, brain tumors, brain abscess, encephalopathies, encephalitides, meningitis, delirium states, brain injury, brain scars and atrophy, cerebral palsy, cerebrovascular disease, toxemias.

**In this outpatient service which accepts referrals from physicians only, a diagnostic-consultation team considers the patient and his problems from the physiologic, psychologic, and social points of view—compiling both longitudinal and cross sectional data. A neurologist, physiologist, pediatrician, psychiatrist, psychiatric social worker and psychologist comprise the regular team and a neurosurgeon, endocrinologist and allergist are consulted as needed. The patient—most often one representing unusual problems in management—is examined by each, and, in addition, regular and special laboratory tests are obtained. All findings are shared in a staff meeting and diagnosis and recommendations are determined jointly. The patient and findings are returned to the referring physician.

Conferences on Convulsive Disorders to county medical societies.

H. B. Zemmer, M.D., the present Vice Chairman of the Council of Michigan State Medical Society and Vice President of the Michigan Epilepsy Center, was of immeasurable assistance in personally introducing this program initially to the membership of the State Medical Society.

Extent and Scope of Service

With slight variations this is the mobile service which has been offered during three summers, each time covering a different area of the state. In 1952, the Alpena-Alcona-Presque Isle, North Central, and Marquette-Alger County areas were covered. Ninety-six EEGs were run during 1,004 miles of travel in five stops. Neurology Clinics and Conferences on Convulsive Disorder were subsequently conducted in Grayling, Alpena, and Marquette. Ninety physicians had been offered service. In 1951, the mobile unit made its initial pilot stop in Flint and then toured the whole of the Upper Peninsula, making seven additional stops. Ninety-five EEGs were completed and 2,724 miles were traveled. Neurology Clinics and Conferences were subsequently held in Flint, Powers, and Sault Ste. Marie. 482 physicians had been offered service.

Because heretofore the sensitive EEG recorder —a console about the size of a small office desk, consisting of eight duplicate radio type channels —had been used primarily in laboratories, many skeptics predicted it would not operate satisfactorily as a portable. The Michigan Epilepsy Center experiment demonstrated that the records obtained were wholly adequate for good interpretation and the technical difficulties minimal. Thus, another "Michigan First" was born.

Neurological Aspects of the Mobile Service

It was the function of the neurological consultant to review the histories and general physical examinations together with his neurological examination and any additional history at the time that the patient and the referring physician were interviewed. These findings were then correlated with the results of the electroencephalograms following which a diagnosis was made.

In several instances, further laboratory procedures were indicated and these were recommended, before a definite diagnosis could be made with a fair degree of certainty. Occasionally, these further procedures were of such a nature as to require the patient to be transferred to a facility where such specialized techniques were available. During the course of these procedures, a final diagnosis was made and the mode of therapy and continued management of the patient was outlined to the referring physician.

In some cases it was felt necessary that the referring physician consult further with the neurologist because of unexpected complications or technical difficulties. Furthermore, it was felt that in an occasional patient, repeat electroencephalograms were indicated at stated intervals in order to re-evaluate the progress of the therapeutic program since it is well established that many times a revision of therapy (especially regarding anticonvulsant drugs) is necessary.

The hazards of some of the anticonvulsant drugs were made known, if necessary, to the family physician; and more often than not, these problems were later ironed out by correspondence.

It was always recommended that, if possible, the patient be referred to the Michigan Epilepsy Center for a re-evaluation should the necessity be deemed advisable.

It is felt that it was quite fortunate that a recording secretary was available to document the important individual details of the patients examined so that fairly accurate records could be obtained in the files of these patients, copies of which were mailed to the referring physicians in charge of the patients consulted.

It must be emphasized that the responsibilities to the patients do not end in a single interview by the consulting neurologist even though all recommendations are carried out as prescribed. It is felt that constant and continued contact with the patient by his physician is necessary. Likewise additional consultation between the referring physician and the consulting neurologist may be required. On the other hand, it is realized that distances involved in a program of this nature cause limitations beyond the control of the consulting agencies.

Conclusions

Distance complicated the many problems in adequate interpretation to physicians and patients as to the purpose, nature and mechanics of the service offered, and created gaps between completion of each part of the threefold program.

(Continued on Page 291)

Febrile Convulsions in Childhood

Review of Their Significance

By C. G. Jennings, M.D.
Detroit, Michigan

EVERY GENERAL practitioner and pediatrician is familiar with convulsions in young children occurring at the onset of febrile illnesses. Because of the anxiety which such episodes produce, both for the child's immediate safety and for his future health and development, they have taken comfort in the doctrine that they are relatively harmless.

This doctrine has been re-examined in a number of studies published during the past ten years. Although it has not been possible to secure an unchallengeable picture of the situation, some clarification has been made. The important fact is that, due to one cause or another, a definite number of children who start by having typical febrile convulsions turn out to have a serious disorder. The distinction between a good and a poor prognosis must therefore rest upon criteria other than simply occurrence with fever.

Clinical Features

By analyzing the differences between different kinds of cases with febrile convulsions, several clinical features have been identified which help to delineate a truly benign condition and to distinguish it from other more serious ones. Amongst the more serious conditions must be numbered idiopathic epilepsy, congenital brain defects, brain injury due to birth and other trauma, and chronic encephalitis. In addition, one must include brain injury due to the convulsion itself, or to the fever, or to the precipitating acute disease.

Relationship to Fever.—The threshold concept is most important in distinguishing febrile convulsions, as Peterman[7] emphasized. The term should be restricted to cases in which a rising fever precipitates a convulsion only after surpassing a level fairly constant for each child. Seizures occurring before the onset of fever, or while fever is declining, indicate a different condition. In benign cases, the threshold is usually 103° Farenheit or higher.[1,5]

Character of the Convulsion.—A benign febrile convulsion is usually generalized and brief. Its duration is usually less than ten minutes. Livingston[5] and Bridge[1] feel that a duration of more than thirty minutes suggests the presence of some complicating factor. Seizures resembling petit mal, or having definite localizing features, and seizures followed by a period of coma or hemiplegia, suggest epilepsy or brain damage.

Relationship to Age.—In one published series consisting mainly of benign febrile convulsions,[3] the age of onset was as follows:

Birth to 1 year	22.9%
1 year to 3 years	63.2%
3 years to 5 years	9.7%
5 years and over	4.2%

This distribution is typical, but the age distribution of febrile convulsions in epileptic and brain-damaged children is similar. In fact, childhood convulsions of all causes are most frequent between one and three years,[6] after which the incidence declines, to rise again after puberty. For this reason, only unusually early or late onset are felt to bear on the prognosis.[1,3,5]

Frequency of Convulsions.—Most cases of the benign condition have only two or three convulsions. A greater frequency is cause for concern, but Livingston[5] reports as many as twenty-three in benign cases. As frequency rises, the risk either of brain injury or non-febrile convulsions increases.

Genetic Factors.—The general incidence of epilepsy in the near relatives of epileptics is about ten per cent. The incidence of convulsions in the near relatives of children with febrile convulsions is much higher; in one series, forty-five per cent.[3] This is true of children having a benign condition as well as of children who later develop non-febrile convulsions.

Moreover, there is a difference between these two groups, in the opinions of W. Lennox,[4] M. Lennox,[3] and Livingston.[5] They found that the near relatives of children with benign febrile convulsions tended to give histories of infrequent convulsions in childhood, while the near relatives of children who turned out to have epilepsy tended to give histories of chronic epilepsy. These findings led W. Lennox[4] to conclude that the disposition to febrile convulsions may be a pure hereditary trait,

TABLE I. CLINICAL FEATURES OF FEBRILE CONVULSIONS INDICATIVE OF A FAVORABLE OR UNFAVORABLE PROGNOSIS

Feature	Favorable	Unfavorable
Relationship to Fever	Threshold above 103° F.	Low threshold
Character of the Convulsion	Generalized. Brief, under 30 minutes. No post-convulsive disturbance.	Localized, other types. Prolonged. Post-convulsive coma or hemiplegia.
Age at Onset	Between 1 and 3 years.	Below 6 months or over 5 years.
Frequency of Convulsions	One or two.	Numerous.
Genetic Factors	Family history of infrequent or febrile convulsions.	Family history of chronic epilepsy.
EEG Findings	Normal, especially shortly after a seizure.	Abnormal, especially between seizures.

which may occur alone (benign febrile convulsions) or in combination with brain injury or the epileptogenic trait. Livingston[5] feels that the occurrence of a febrile convulsion in a child without a familial disposition may be more serious, because such an occurrence would require a more severe precipitating illness.

In the present writer's opinion, this evidence strongly supports the hypothesis that a distinct condition characterized by convulsions only with fever, and by a benign course, really exists.

Electroencephalographic Findings.—The EEG is generally normal in benign febrile convulsions. In M. Lennox's series[2] of ninety cases with EEG's, sixty-eight were normal and twenty-two abnormal during the period in which convulsions were occurring. In a three-year follow-up, only four of the normals suffered subsequent non-febrile seizures, while seven of the twenty-two abnormals did so. An abnormal EEG is therefore a highly unfavorable finding.

In this same study, it was noted that EEG's taken within a week after a convulsion were more frequently abnormal than those taken later. Lennox feels that this indicates the injurious nature of the episode. Bridge[1] points out that non-febrile convulsions due to such brain injury are apt to occur after a latent period of about two years, and as late as five years.

The distinguishing features mentioned in the preceding paragraphs are summarized in Table I.

Incidence and Outcome

Referring to various surveys of large population samples, W. Lennox[4] has estimated that about 2 per cent of all children have febrile convulsions. Peterman[7] thinks the incidence is much lower, and points out that the convulsions "associated with acute infections" recorded in his large published series of convulsions in children[6] contains many cases which he would not classify as typical benign febrile convulsions.

Regarding the frequency of unfavorable outcome, there is conflicting evidence. W. Lennox[7] estimates by the survey method that about five per cent of children with febrile convulsions have epilepsy as adults. By the individual case study method, the same author notes a serious outcome in 26.2 per cent. Peterman[7] takes the extreme view, finding seventy-nine (62 per cent) of 128 cases with subsequent disability. Individual case studies are undoubtedly weighted by the failure of the milder cases to reach intensive examination.

With respect to the risk of brain damage consequent to a febrile convulsion, W. Lennox[4] estimates an incidence of about 5 per cent, again probably in the more severe cases.

Prognosis of the Individual Case

While a separate benign condition of childhood characterized only by febrile convulsions probably does exist, it can be diagnosed with certainty only in retrospect. When the patient is seen early in the disease, the information available at that time must be used for whatever prognostications are necessary.

Referring to the criteria given above, the fever threshold, the character of the convulsion, the age at onset, and the frequency till that time will be available immediately, and the family history also can probably be obtained promptly. If these criteria point to a benign condition, further study may well be deferred pending future developments. This will be the case for the majority of patients.

On the other hand, when the available criteria include several or many that are unfavorable, it would seem necessary to study the situation deliberately, after the acute episode is over, with special attention to possible brain injury, developmental disturbance and coincidental disease. In such a study, one or more EEGs should be obtained whenever possible.

The accuracy of prognosis derived from such studies must not be regarded as very accurate. M.

Lennox[3] cites several case histories illustrating this point. There are two principal reasons for this. One is that even definite epilepsy at this age is capable of spontaneous recovery, in as many as 36 per cent of the cases.[1,5] The other is that slight brain injury in early childhood may not give rise to symptoms until years later.

Treatment

It is scarcely necessary to describe the treatment of the febrile convulsion itself. Everyone is familiar with the measures used to reduce fever, to produce sedation, to restore circulation and oxygenation, and to correct the underlying cause.

Prevention of recurrence of the convulsions is of greater pertinence. The general attitude favors the use of antipyretics and anticonvulsants, especially Phenobarbital, at the onset of each illness. Such programs often prove inadequate, partly because of the difficulty in predicting a sudden rise in fever at this age.

It is the writer's present opinion that the best policy is continuous anticonvulsant medication. This should be started after the first episode if unfavorable factors are present, and at least after the third. Diphenylhydantoin (Dilantin) is preferred because of its effectiveness, its low toxicity, and its availability in dosage forms acceptable to young children. If it should prove inadequate, other drugs such as Phenobarbital or Mesantoin should be added or substituted. Continuous treatment seems to be more acceptable to the child, and he is in a state of saturation at the time of an illness, so that inability to take the medication for a brief period may not destroy its usefulness. Treatment should be continued through the third birthday and until a year after the last convulsion. EEGs should be obtained where possible, and effective treatment should not be discontinued when the record is abnormal.

Such a treatment plan should not only give better control of the symptom itself, and reduction in the incidence of brain injury, but it should also benefit the child by a better follow-up.

Summary and Conclusions

1. It is concluded that the existence of a disease entity characterized by febrile convulsions, onset in early childhood, spontaneous recovery, and absence of sequelae, is confirmed by the evidence.

2. The symptom of febrile convulsions may occur in other conditions as well, notably childhood epilepsy. The risk of a child developing epilepsy following an initial febrile convulsion is uncertain, but lies somewhere between 5 per cent and 25 per cent.

3. A febrile convulsion of any cause involves the risk of brain damage, from the convulsion itself and from the precipitating illness. The risk of this accident is in the region below 5 per cent.

4. Since a febrile convulsion is not, by itself, indicative of a harmless condition, other factors have to be taken into consideration in prognosis. Certain factors believed to indicate a favorable or unfavorable outcome are discussed and presented in tabular form.

5. Continuous anticonvulsant treatment is recommended for all but the mildest cases. The selection of cases and drugs and the criteria for discontinuance are discussed.

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A DEFINITION

"The Doctor of Medicine is one whose training and outlook are predicated upon the acquisition and use of all available knowledge for the benefit of each individual patient. He makes no effort to lure people to his office. He and his *Profession* are completely responsible for what we know and do regarding sanitation, prevention of disease and public health.

"The cultist is one whose training and outlook are predicated upon some single, narrow, philosophic thesis or assumption. He fits each patient into his narrow band of knowledge and reasoning. He does his best to lure people into his office to increase his *Business*. He contributes nothing to sanitation, preventive medicine, or public health."

SAMUEL W. HARTWELL, M.D., Muskegon

Use of Milontin® in Treating Mental Patients with Petit Mal Convulsive Disorders

By Graydon R. Forrer, M.D.
Ypsilanti, Michigan

THE CONTROL of grand mal type of epileptic disorders in an institutional setting, is usually not a difficult problem. Mental patients with the petit mal type of disorders, be it pure petit mal (pyknolepsy), mixed petit mal or petit mal combined with other types of seizures, present a problem in control due to their inability to communicate the number of seizures experienced, the severity of the seizures, and such other pertinent information required by the clinician. Oftentimes the discovery of this type of disorder rests upon observations by the physician's staff, by nurses or attendants, or is made by examination of routine electro-encephalograms. Drugs such as trimethadione (tridione), Mebaral and phenobarbital have been employed with some measure of success in the treatment of these patients. A new drug, Milontin®, has recently been demonstrated to be very effective in the treatment of pure and mixed petit mal epilepsies and petit mal associated with grand mal and psychomotor epilepsy. This is a report of its use in such individuals whose condition was complicated by other types of mental disease.

Methods

Four male patients, ages eleven, twelve, forty-six and forty-nine years, and three female patients ages eighteen, thirty and fifty-five years, comprised the subject material for this investigation. The diagnosis in each case was confirmed by electro-encephalographic studies and these studies were repeated at intervals during the course of investigation. The medication schedule was individualized to suit the needs of each case. After a period of Milontin medication, the individuals were placed on placebo therapy until the disorder returned to determine whether some factor other than the medication might be influencing the result. Detailed medication schedules are contained in Table I. During the course of the investigation, routine blood and urine examinations were carried out at approximately weekly intervals. A method for determining the blood concentration of Milontin was developed, and studies were carried out on this group in order to determine what levels of medication are obtained following a certain dose,

TABLE I. MILONTIN THERAPY SCHEDULE

Case	Daily Dose	Duration	Remarks
L.S.	1.8 Grams	3 months	
	Placebo	3 months	
	1.8 Grams	7 months	
	Placebo	7 days	
	1.8 Grams	4 months	Discharged
E.D.	0.9 Grams	3 months	
	Placebo	2 months	
	0.9 Grams	1 month	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing
M.D.	0.9 Grams	6 months	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing
S.D.	0.9 Grams	6 months	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing
E.C.	0.9 Grams	6 months	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing
J.V.	0.9 Grams	6.5 months	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing
P.L.	0.9 Grams	3 months	
	Placebo	4 months	
	0.9 Grams	6 months	
	Placebo	7 days	
	0.9 Grams	8 months	Medication continuing

Milontin is the Parke, Davis trade name for N-methyl-a-phenyl-succinimide. The material for this study was furnished by the Department of Clinical Investigation of Parke, Davis & Company.

and whether or not there was any relationship between the dosage and therapeutic effects.

Results

Because of the marked differences in response of individuals with petit mal types of epilepsy, the following brief summaries of each of the cases treated at the Ypsilanti State Hospital are given:

TABLE II. SERUM LEVELS OF MILONTIN IN HUMAN SUBJECTS

Dose Schedule: 0.3 Gm. Milontin X5027 at 8 AM—12 N—6 PM daily from 4-15-52 on.

Subjects:		1	2	3	4
Weight (lbs.)		128	145	140	130
Last Dose	Sample	(r/ml)	(r/ml)	(r/ml)	(r/ml)
Pre-drug		0	0	0	0
4/15—8 AM	4/15—10 AM	2.1	3.9	0.0	3.3
4/15—12 N	4/15—2 PM	3.7	3.3	0.3	3.6
4/15—6 PM	4/15—8 PM	4.3	0.9	0.7	3.8
4/15—6 PM	4/16—8 AM	5.0	0.2	0.2	1.0 (24 hr.)
4/21—8 AM	4/21—10 AM	5.5	1.7	0.8	3.6
4/21—12 N	4/21—2 PM	5.4	3.0	0.6*	3.8
4/22—12 N	4/22—2 PM	—	—	4.5*	—

*Nurse failed to give 12 N dose.

Case 1.—M. D., a thirty-year-old white woman, was admitted June 7, 1948, with a diagnosis of paranoid schizophrenia with convulsive disorder petit mal type. This patient, prior to Milontin therapy had frequent petit mal type seizures. The seizures appear to be entirly controlled with Milontin. There was no great change in her personality. She still was quite irritable and showed signs of confusion from time to time. With placebos, two petit mal seizures occurred with recurrence of irritability and confusion.

Case 2.—P. L., an eighteen-year-old white girl, was admitted January 30, 1951, with a diagnosis of organic brain disease, mental deficiency and petit mal type of convulsive disorder. This patient was extremely uncooperative at home. In frequent periods of rage she would scream and yell, talked continuously and incoherently and was extremely difficult to handle. With Milontin therapy she became free of seizures. There was a marked improvement in her control of emotions. She became more co-operative about the ward, was able to socialize better with other patients. On placebo medication, tendencies for more emotional lability, flare of temper and inability to get along with other patients were present. Resumption of Milontin resulted in improvement in general behavior and attitude.

Case 3.—S. D., a forty-nine-year-old white man, admitted August 23, 1951, was placed on Family Care from this hospital July 11, 1952. He was hospitalized because he assumed one position for long periods of time, had paranoid feelings directed against his family, and showed depressive features. The diagnosis was organic brain disease with petit mal type convulsive disorder. Milontin produced complete abatement of petit mal attacks. On placebos he had several petit mal attacks, was markedly more emotionally labile and showed many more depressive features. With Milontin, this patient was able to be placed on a Family Care Program and appears to be making a very adequate adjustment.

Case 4.—E. C., a fifty-five-year-old white woman, admitted September 26, 1950, with a diagnosis of manic depressive psychosis with convulsive disorder, petit mal type, post-encephaletic. This patient suffered a severe case of measles at the age of two, following which petit mal type of convulsions developed. Upon admission to the hospital, she showed marked irritability and paranoid tendencies, with occasional hysterical outbreaks of laughter and mania. With Milontin the number of seizures markedly decreased along with discernible personality change.

Case 5.—E. D., a ten-year-old white boy, was admitted March 9, 1950, with a diagnosis of primary behavior disorder, organic brain disease and petit mal. Prior to and continuing with hospitalization, he was compulsive, destructive and subject to temper tantrums. Milontin appeared to produce minimal improvement in his stability. He seems to adjust better to the other children in the ward and shows somewhat less compulsive behavior.

Case 6.—L. S., a forty-eight-year-old white man, was admitted January 17, 1951, with a diagnosis of chronic alcoholism with petit mal type convulsive disorder. Prior to hospitalization he was chronically intoxicated, irritable, displayed paranoid ideation and had five to six petit mal type seizures a day. During hospitalization, the patient showed marked irritableness, paranoid feelings directed against his wife, exhibited no insight into his condition and little desire to conform to the ward routine. On Milontin his irritableness decreased markedly, ward behavior improved and seizures stopped. He was released from this hospital on convalescent status August 21, 1952.

Case 7.—J. V., a twelve-year-old white boy was admitted August 29, 1951, with a diagnosis of juvenile

behavior disorder with petit mal psychomotor type and grand mal convulsive disorder. He was hospitalized because of markedly aggressive and hostile behavior and inability to conform to environment at home and school. In the hospital he showed markedly aggressive behavior, directed mostly at other patients, inability to conform to social situations, became markedly disturbed at times, was irritable and hyperactive. Milontin alleviated many of these symptoms. On placebos, his old type of behavior returned. He remains hospitalized.

Toxic signs of even a very minor nature were not encountered during this study. There have been no abnormalities observed in the blood or urine, even though some of the patients have continued to take the medication for as long as twenty months. Changes in the electroencephalogram were noted in four of the seven patients while on the medication. In the other three patients there was clinical improvement without the electroencephalographic changes.

The blood concentration of Milontin obtained following various dosage schedules is summarized in Table II. The use of Milontin in this group of patients aided in the general management of five of the seven. While on placebo therapy, five of the seven showed such symptoms as being emotionally more labile, depressed, more irritable and confused, increased hyperactivity; most of the above symptoms disapearred in these patients upon the resumption of active Milotin treatment. No other drugs such as phenobarbital were used to control the above symptoms in these patients.

Discussion

It is noteworthy that during the course of this investigation no toxic signs were encountered, even though these individuals were suffering from complications which might predispose to the production of such untoward reactions as dizziness, headache and the like. In a report on the treatment of fifty cases of petit mal epilepsy, Zimmerman[1] noted an incidence of toxic reactions in 22 per cent; included among these reactions were nausea, vomiting, headache, dizziness, drowsiness and a dreamlike state. However, toxic reactions such as photophobia, rash and granulocytopenia, which are commonly encountered with some of the other drugs used for the treatment of petit mal epilepsy were not observed by him. From the results of our blood and urine studies we are convinced that Milontin can be given over a long period of time without the development of serious damage to the hemopoietic or renal systems.

It is quite interesting that clinical improvement is obtained in some cases without changes in the electroencephalographic pattern. Inasmuch as the exact mechanism of action of Milontin is not known, we cannot explain at this time why clinical improvement should be obtained without changes in the electro-encephalogram. From studies in animals, it has been demonstrated that Milontin penetrates into the brain tissue quite rapidly and the concentration in the brain tissue parallels that found in the blood. It is quite obvious, however, that in such a complicated disease as petit mal epilepsy, in which the basic physiological derangements in the brain cells are not known, that one might demonstrate clinical control without changing the basic electroencephalographic pattern.

From an examination of the results in Table II, it is impossible at this time to draw any conclusions as to the relationship of blood concentration of Milontin and the therapeutic results obtained.

Summary

1. Milontin therapy was successful in the control of institutionalized mental patients with petit mal type of seizures.

2. Milontin aided somewhat in the management of patients insofar as behavior is concerned.

3. In some cases, there was clinical improvement without changes in the electro-encephalographic pattern.

4. No toxic reactions, including disturbances in the blood or urine, were noted during the course of this study.

5. No correlation can be drawn at this time between the blood concentration of Milontin and the therapeutic results obtained.

Reference

1. Zimmerman, F. T.: Use of methyl-phenyl-succinimide in treatment of petit mal epilepsy. Arch. Neurol. and Psychiat., 66:156 (Aug.) 1951.

Ypsilanti State Hospital

Poliomyelitis Control in Michigan

A Critical Review

By F. S. Leeder, M.D.
Lansing, Michigan

THIS YEAR for the first time, Michigan doctors used immune globulin on a comparatively extensive basis in an effort to prevent or modify paralysis from poliomyelitis. The widespread use of immune globulin as a "control" was largely dictated by public pressure resulting from published results of large-scale field trials in Texas, Utah and Idaho in 1950 and 1951.

The trials were misinterpreted by the public as confirmation of a means of controlling poliomyelitis, when actually they confirmed only that antibodies can prevent or modify the development of paralysis in poliomyelitis—certainly not new knowledge, nor the hoped-for "miracle" for protection against the crippling effects of the disease.

Now it appears that soon a vaccine will be tested in large-scale, dramatic demonstrations similar to those used in the globulin trials. Such dramatic demonstrations, if successful, will undoubtedly bring about inexorable public demand for immediate wide-spread use of the vaccine for poliomyelitis prevention.

A number of questions must still be answered before the true worth of globulin or of a vaccine can be determined.

In Michigan this year, from January 1, 1953, through October 2, 1,765 new cases of poliomyelitis have been reported to the Michigan Department of Health. For the same period in 1952, there were 2,794 cases reported and for the same period in 1951, there were 1,141 cases reported. A provisional breakdown of cases this year by week of onset indicates that the peak week is the thirty-third week, which ended August 15. This makes the 1953 peak two weeks earlier than that of 1952, which occurred in the last week in August. It is obvious that the reported incidence of poliomyelitis gives no clue as to either the effectiveness or ineffectiveness of immune globulin.

In addition to the routine administration of 0.14 cc. of immune globulin per pound body weight to selected members of households in which a case of poliomyelitis has occurred, mass community prophylaxis was used in one county in Michigan, namely Marquette. At the time it was decided to offer mass prophylaxis to Marquette there had been twenty-one cases reported, which gave a projected case rate of 800 per 100,000 for the calendar year. Of the cases reported, 52 per cent of them were paralytic. Since over 70 per cent of the cases were occurring in the age group one through nine, it was decided to inoculate this high risk group. In all, 9,203 children were given 0.14 cc. of immune globulin per pound body weight on July 22 through July 24. The amount of immune globulin used was 60,500 cc. It will not be possible to judge the effect of this mass injection program until all polio cases that occurred both before and after the program have been muscle tested by a competent physical therapist.

In co-operation with Dr. Thomas Francis of the School of Public Health, two other studies were attempted. In one, using a research grant of 10,000 cc. of immune globulin above our basic allotment, double the minimal dose of immune globulin was given to all members of households in which cases occurred in an attempt to see if we could flatten the usual incidence curve. The data on this cannot be analyzed until the end of the disease year.

Concurrently, Doctor Francis and his associates selected households in which there were two or more siblings for virus studies. Prior to giving immune globulin to household contacts, blood specimens were collected for antibody studies and oro-pharyngeal washings were obtained to determine the percentage of contacts with the virus in their noses and throats. In addition, serial stool specimens were collected for quantitative virus studies. Matching blood specimens will be taken sixty days after the first blood specimen for comparative antibody studies. The results of this study will not be known until all the laboratory work is completed. However, when the study is completed there will be partial answers at least to: the effect of immune globulin on latent active immunity resulting from subclinical infection; the per cent of household members with virus in the oropharynx and/or in the feces; the amount of polio

From the Division of Disease Control, Michigan Department of Health.

virus excreted in relation to the age and antibody level of the members of the household.

Since there is a general impression that a poliomyelitis vaccine is almost ready for use, or at least "just around the corner," it is timely to report that such a vaccine is not yet available and that one can only guess as to what may be "just around the corner." The objective is of course to imitate what nature now does for 99 to 99.9 per cent of the population, but without the 1 in 100 to 1 in 1000 risk of paralysis, which is the price of nature's herd immunity program. Most research epidemiologists feel that field tests to study the appearance and persistence of antibodies to all three types of poliomyelitis virus in large groups of vaccinated children and in large groups of unvaccinated controls is essential. Such a study would have to continue over a period of at least five years before an adequate appraisal of the efficacy of the vaccine could be made.

Before any vaccine is used extensively, it must be determined whether or not, or to what extent, it will interfere with subclinical infections, which in the vast majority of people result in naturally acquired immunity to poliomyelitis. If a vaccine interfered with subclinical infections and would not in itself confer lifetime immunity and had to be repeated at intervals throughout life, it would add to the hazards. The point is that poliomyelitis is usually a more severe disease in older people than in the very young. If, through vaccination, we move up the age at which people develop clinical polio, we have done harm, not good.

If we are to gain protection against paralytic polio through periodic injection of a foreign protein, we must not lose sight of the potential danger of sensitization. Since naturally occurring paralytic poliomyelitis is a relatively rare disease, a satisfactory vaccine must not in itself be dangerous to even one person in a thousand.

When a vaccine is found that fulfills all the requirements for antigenic potency, safety and plentiful source, it must be remembered that since so many children are already naturally immune through subclinical infection untold thousands of already immune children will be injected needlessly with a foreign protein.

Obviously, it is highly desirable to develop a simple laboratory test to identify the great number of immune children making unnecessary a community-wide vaccination program, which is sure to be demanded by the public should a safe vaccine be announced.

A discussion of active immunity due to a vaccine would not be complete without some mention of the as yet undetermined potential hazards inherent in a program involving temporary passive immunity through the injection of antibodies contained in poliomyelitis immune globulin. If it is shown that the temporary passive prevention of paralytic polio interferes with subclinical infection and lasting immunity, then the use of immune globulin would result in raising the age level at which clinical poliomyelitis manifests itself, with a greater hazard in the extent of paralysis and/or death.

Furthermore, evidence is accumulating that repeated injections of immune globulin can result in hypersensitivity with a potential hazard of anaphylaxis. If immune globulin is potentially dangerous to even one person in a thousand, the question of its indiscriminate use in poliomyelitis prophylaxis should be considered gravely.

THE MONTH IN WASHINGTON

(Continued from Page 252)

H. V. Higley, on treatment of non-service connected cases. and with Adm. Arthur W. Radford, chairman of the Joint Chiefs of Staff, Dr. Frank Berry. Assistant Defense Secretary for health and medical matters, and Dr. Howard A. Rusk, chairman of the Health Resources Advisory Committee, on medical care for military dependents. Representing the AMA at one or more of the meetings were Drs. Walter B. Martin, David B. Allman Gunnar Gundersen, Louis Orr, James C. Sargent, W. L. Crawford, George F. Lull, Ernest B. Howard and Frank E. Wilson.

Earlier, AMA representatives talked over legislation with President Eisenhower at the White House.

Poliomyelitis Experience at Herman Kiefer Hospital

By Donald C. Young, M.D.,
Paul T. Salchow, M.D.
and
Willard R. Lenz, M.D.
Detroit, Michigan

HERMAN KIEFER HOSPITAL functions as the diagnostic and treatment center for the vast majority of acute communicable disease cases in Wayne and Macomb counties. The total population of these counties is approximately three million. During the 1952 poliomyelitis season, 1,940 persons were referred for examination for suspected poliomyelitis, of whom 876 were found to have the disease and were admitted for treatment.

Epidemiological Data

Pattern of Spread of Infection.—The first case was admitted on May 16 from northwestern Detroit. It is of interest in passing, that during the past several years our early cases have regularly come from the western half of Wayne county. Of the initial fifty admissions only six lived in the central area of the city, and it was not until after July 15 that the first cases from the east side appeared, after which widespread distribution was apparent.

Case Ratio.—Cases of poliomyelitis reported in Macomb County from May 1 through December 31 numbered 112, 102 of which were admitted to the Herman Kiefer Hospital. These represented 11.6 per cent of all admissions for poliomyelitis as compared with the expected 7.1 per cent on the basis of 1950 population figures.

Areas in Wayne County, reporting directly to the County Health Department, reported 289 cases, 196 (67.8 per cent) of which were hospitalized at Herman Kiefer Hospital. Independently reporting communities comprising Dearborn, Highland Park, and Hamtramck sent in fifty-two cases (81.2 per cent) of their sixty-four reported cases. The percentage of cases expected from Wayne County, outside Detroit, as a whole on a population basis, was 22.1 per cent as against the 28.3 per cent (248) of all cases actually received. This increase in observed cases over expected cases was made up chiefly of significant increases from Allen Park, Lincoln Park, Inkster, and Redford Township—all populous communities in our western area. It was felt, in general, that the more sparsely settled areas had fewer observed than expected cases and the areas of heavy concentrations of population had more observed than expected cases.

Detroit itself was expected to account for 70.8 per cent of all hospital cases on a population basis, but actually contributed only 59.5 per cent of our hospital admissions. This 11.3 per cent difference was probably due in part to a greater participation by all general hospitals in this metropolitan area in the hospitalization and care of poliomyelitis patients during 1952. Increasing numbers of uncomplicated cases were also being treated in the home to contribute further to the decrease.

Five patients from Oakland County were admitted to the Communicable Disease Division during 1952, as well as one Iowan, who developed poliomyelitis while visiting Detroit relatives.

Ages.—Early in the 1952 outbreak, it was already apparent that there were fewer patients in the 20+ year age group than in previous years. The final summary is shown in the following table:

TABLE I

Age Group	*Per Cent*
0-4	29.0
5-9	24.5
10-14	15.7
15-19	7.1
20+	23.7

The age range covered during this epidemic varied from seven weeks to sixty-two years, with two patients over fifty years of age and eleven more than forty years of age. There were nineteen infants under one year of age, seven of whom were less than six months of age.

Sex and Race.—Males numbered 488 (55.7 per cent) of the series; 458 (52.3 per cent) were white, and 30 (3.4 per cent) of all cases were colored. Females totalled 388 (44.3 per cent) of all cases; 371 (42.3 per cent) were Caucasian, and seventeen (2.0 per cent) were colored females.

Colored males represented 6.1 per cent of the males while colored females composed 4.4 per cent

From the Communicable Disease Division, Herman Kiefer Hospital, Detroit.

of the entire female group. Comparable figures for 1951 were 13.6 per cent and 11.4 per cent, male and female, respectively. There are no apparent inferences to be drawn from this interesting observation which is in inverse relation to alleged local population trends, except that the probable and more frequent occurrence of subclinical poliomyelitis in the negro group is suggested as a logical explanation.

Continuing the pattern of the past several years, there was a definite numerical predominance of males over females in all age groups excepting the 20+ year age group. Here the females exceeded the males by the decisive margin of 64 per cent to 36 per cent. This trend was present in both white and colored groups evaluated separately as well, and also pertained to the various classification groups such as non-paralytic, spinal, spino-bulbar, and total paralytic types.

Season.—The initial admission with poliomyelitis of the 1952 outbreak occurred May 16. There were no new cases during the ensuing four weeks; however, four patients were admitted in the period of June 20 to June 30. There was a rapid and progressive increase in the number of cases admitted from July 5 through August 2. From this time until September 12, the number of admissions remained constant and at a peak level. From September 12 until September 26, there was a slight decline in incidence and this was followed by a rapid and progressive decline to reach a minimum on December 5. One patient was admitted in May, 4 in June, 100 in July, 344 in August, 271 in September, 119 in October, thirty in November, and seven in December. The curve of incidence of admissions followed what was considered a normal pattern for this area with the exception of the sustained peak level which lasted much longer than in previous years. August was the month of maximum incidence of cases. This was also true in past years with the exception of 1950. The maximum number of admissions in a single day was twenty-one. This occurred on August 14. The maximum number of admissions in a single week was August 25 through August 31, during which ninety-two cases were admitted to the service. In 1951, the maximum number of admissions in a single day occurred on August 8 and 12 with twelve admissions each day. The week of maximum incidence of admission was August 7 through August 12.

Clinical Type of Disease.—The most outstanding clinical features of poliomyelitis during the 1952 season were the high incidence of cases in general and the extensive paralysis of the individual patients. Paralysis of a single extremity was relatively uncommon. Five hundred and seventy-eight (66 per cent) of all of our cases, were of a paralytic type. Other features of the outbreak which were of interest were:

1. An atypical onset was common, with fewer than 50 per cent of the cases showing biphasicity or the so-called "dromedary-phenomenon."

2. Headache was an outstanding symptom, particularly in the adult group, and in a few instances was said to have been present over a period of several weeks.

3. Nausea and vomiting were common early symptoms.

4. The temperature ranges were often much greater than had been experienced in earlier epidemics.

5. Ataxic and preparalytic tremors were frequently encountered.

6. Paralysis tended to spread rapidly.

7. Few patients had a spread of paralysis in the presence of normal temperature, although we noted one instance of the reappearance of temperature with the occurrence of extensive paralysis requiring a respirator, after four days of normal temperature, following the usual regular febrile period. This was on the eve of the fifth day when we routinely release patients who have remained nonparalytic with the expectation that the point of maximal involvement is past.

8. Bladder paralysis occurred more frequently than in any previous epidemic.

9. Many high spinal fluid cell counts were recorded, a number approaching fifteen hundred with polymorphonuclear leukocytes found earlier and in greater frequency than was usual.

10. Fatigue and trauma again seemed prominent in determining the type of disease.

Spinal involvement was present in 399 patients (45.5 per cent) of all patients, with 220 (25.1 per cent) being males and 179 (20.4 per cent) females. Sixty eight (7.9 per cent) of all patients, showed bulbar involvement, while ninety-seven (11.2 per cent) had spino-bulbar or mixed involvement. Five patients showed a frank and exclusive en-

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Routine Use of X-Ray Pelvimetry

By R. C. Hildreth, M.D.
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THERE IS SOMETHING to be said for the use of a routine x-ray examination in every primipara. To set up such a standard would necessitate that the procedure be simple, safe and practical. Specific advantages of x-ray pelvimetry, performed prior to labor, has been brought to attention through experience in attempting to examine over 300 patients by x-ray, who were in various phases of dystocia.

Our community underwent a gross shift of deliveries from homes to hospitals between 1936 and 1943. Today almost all of the primiparas not only deliver in our hospitals, but they also see their physician before the eight-month interval. Since obstetricians and general practitioners still encounter the occasional case demanding x-ray study, it is timely to point out modern technique of x-ray pelvimetry and the practical knowledge that has been gained from past pelvimetry work.

X-ray pelvimetry began in earnest in our radiology departments about the year of 1938, at which time the more simplified method of Ball[3] surplanted the technique of Thoms. During these years just three films were taken as a standard practice. The same three films are still taken today in the routine case, but since 1945 we have had sufficiently powerful equipment to proceed with all films taken in the erect position. This erect attitude has very definite advantages with three film technique. Naurally, certain special cases and research work in pelvimetry often require more than just three films.

Dr. Ball's [2] work in the late 1930's along with high powered rotating anode tube availability in 1945, now permit films to be taken erect at 40" distance, 100 KVP and 200 milliamperes. Time intervals are kept to less than 1½ second duration in order to prevent motion. The truly important factors in addition to an experienced technician are the tube distance and short exposure as well as an adequate aluminum filter as determined by a roentgen output meter. Total filtration should never be less than 1½ mm. of aluminum. The amount of irradiation reaching the average eight and one-half month-old fetus as determined by 'r' meter measurements for the three exposures does not exceed one roentgen.[8]

The possible deleterious effect of irradiation on an eight-month fetus is remote as compared to a one or 2-month-old fetus. Since such a possibility may still exist in the minds of those doctors interested in genetics, one certainly recommends interval measurements of diagnostic x-ray machines used in pelvimetry work by a roentgen meter. A dosage of less than one roentgen to an eight-month fetus can hardly be considered harmful by present day irradiation standards.[6]

In the first two film exposures, the central ray is directed at the central point of the pelvic inlet which is often five to six inches below the iliac crest (Figs. 1 and 2). Inlet pelvic diameters may then be accurately measured to within 1 or 2 mm. by the use of simple distortion correction tables. In large women, the distortion factor may run as great as 20 or 25 per cent. In Figure 4 there is shown a practical home made device which may be substituted for making corrected film measurements. People who loathe tables may find this device of value, and its accuracy will be sufficient in most work. It is a modified Sussman pelvimeter, as we may call it, which is held snugly against the perineum by the patient during the exposure of the lateral view (Fig. 4). The small plate of steel in the center of the presswood support contains fifteen small holes drilled in a line exactly 1 cm. apart. Since the plate then lies the same distance from the film that the true conjugate does (object-film distance) its distortion will be the same.[7] One need then merely mark off the length of the T.C. on a straight edge. This length is transposed and counted off on the perforated strip of metal image, the resulting reading of which will be in actual centimeters. Complete and simple recording of this method of measuring pelvic diameters is diagrammed and itemized in Colcher and Sussman's original article.[4] By checking with distortion tables we find that in actual practice the steel perforated scale can also be used for rough estimation of the transverse of the inlet. In those cases where this simple pelvimeter suggests the probability of justo minor or contracted diameters, correcting tables are resorted to for true accuracy.

The value of accuracy of measurement, more precise than that received from external conjugate



Fig. 1. X-ray tube is centered to the middle of the plane of the pelvic inlet (lower black line). The upper black line is the true conjugate. Symphysis pubis is well seen in the erect attitude. Note the 15 cm. long perforated, metal pelvimeter bar beneath the symphysis.



Fig. 2. Frontal study and second routine view exposed. The tube again is centered to the middle of the plane of the pelvic inlet. This particular radiograph taken erect also happens to show displacement of the skull from the mid-line. In absence of pelvic disproportion this is pathognomonic of placenta previa.



Fig. 3. High and anterior positioned lateral view with quick exposure soft tissue technique. Information concerning fetal multiplicity, fetal anomaly and stage of fetal development is frequently gleaned from this view. Patient is same as in Figure 2, and shows placenta is posterior and low.

or Baudelocques methods, is reflected by analysis of 379 consecutive delivery cases reported by Ane' and Menville.[1] In this group there were 18 per cent who had one diameter shortened by more than one centimeter. Within this special 18 per cent group we find that 85 per cent had difficult labors, prolonged labors or sections. Measurement knowledge is of considerable value in prognosis of the future course of pregnancy.

In regard to actual film interpretation by a doctor the shape, length and axis of the sacrum as seen in the lateral view (Fig. 1) is second in importance to measurement of the inlet diameters. The sacrum has considerable effect on the factors of descent and rotation which occur in the mid-pelvic zone. The width and shape of the sacrosciatic notches is a third observation which pelvimetry has to offer over the more commonly taken external pelvic and rectal clinical examinations. The outlet of the pelvis is accessible for better measurement directly by the obstetrician.

Radiologists, beginning pelvimetry work, soon learn many of the fundamental truisms about the passage and passenger that the obstetrician has placed in writing over the past century. For example, he will soon come to realize that the position of the fetus and other soft tissue factors more frequently cause dystocia than do shortening or distortion of the birth canal diameters.

There are three observations that directly concern the passenger that can also be accurately determined on routine x-ray films. These are multiplicity of birth, child position such as transverse, face, single footling or occiput posterior and the presence of fetal monsters.

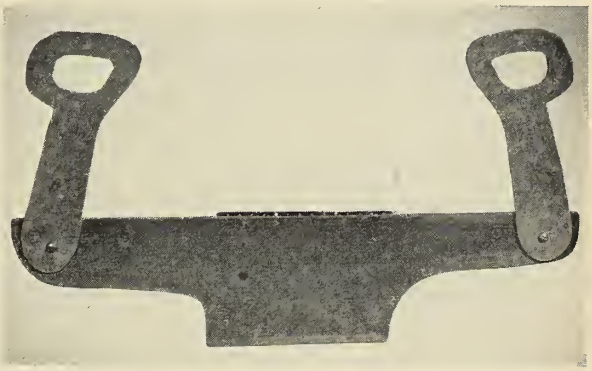


Fig. 4. Sussman pelvimeter centimeter bar adapted to erect pelvimetry by pressdwood appliance. Patient grasps handles and holds the towel-covered bar snugly against perineum for view in Figure 1.

We now come to other soft tissue observations, visible on routine films which are less measurable and less reliable. As seen on the x-ray the position of the placenta is visible in over 80 per cent of our routine studies. However, it is so accurately observed on erect films in those cases of placenta previa and partialis that we have abandoned the use of air cystograms for this determination. Occasionally its position is seen to effect engagement and the position of the shoulders of the child. Knowledge of its position is of value when section is contemplated.

Of even less accuracy than placental position determinations are the x-ray opinions concerning fetal death, age of the child and fetal weight. And, of course, in only one out of a hundred cases is a scrotum visible to permit pre-delivery sex determination. Additional films and special views aid somewhat in these problems. If one takes both erect and horizontal films he will often show spine collapse or air in fetal bowel, signs of fetal death before the more commonly discussed skull overlap sign is visible.

Skull volume and fetal length measurements as determinants of fetal weight are just not accurate as far as a three film erect routine is concerned. The upper lateral view (Fig. 3) often aids in seeability of the knee epiphyses which usually appear about the thirty-seventh week of gestation. This appearance remains the most accurate sign we have toward measuring the stage of fetal development during the last trimester.[5]

A final word in this section on film interpretation in regard to the flat pelvis. This common condition is often unrecognized when x-rays are not taken. The first stage of labor may be prolonged while the skull molds and squeezes itself past the narrowed true conjugate. Once past the narrowed inlet labor may nearly precipitate and this recognition is significant in the prevention of sudden fetal skull expansion and associated cerebral hemorrhage. I also well recall the multipara who passed the nine and one-half pound child through a 9.5 cm. (normal is 11.5 cm.) true conjugate and without too much difficulty, but the transverse of the inlet was well above average. It is when one finds both inlet diameters to be small and the child to be large that he must contemplate section.

A cephalic labor may proceed normally but a second labor as a breech may have difficulty with a justo minor pelvis. The trip the patient makes to the x-ray department and the modified Walcher position she adopts in standing erect for the film taking, has often permitted sufficient rotation for labor to progress. Interval films to determine labor progress are often warranted in the particular case.

The economic phase of x-ray pelvimetry on all primiparas is interesting to consider. Nine hundred and fifty women or 28 per cent of our 3,400 annual community pregnant women are primiparas. This would average out to approximately one pelvimetry examination per day for each of the community's three radiological departments which would not be an undue tax on equipment or personnel.

Would a $15 or $20 x-ray charge snow under the average young family that already faces a $120 physician's fee, a $120 average hospital fee and some $85 for a layette? If one views the situation as some do the health insurance problems and considers the adage that an ounce of prevention is worth a pound of cure, the program may not be too impractical. Today great emphasis on care of the newborn finds support in the fact that such care is one of the yardsticks by which societies are classified and measured.

It is possible that there are other gains from x-ray pelvimetry for the family than those purely medical. I refer to predelivery knowledge of fetal monsters. Forewarned is forearmed in this crisis. One year we had an unusual high of seven anencephalics. Another possible family gain may be a tie in with mothercraft. These classes which include some of Dr. G. D. Read's work in England, also discuss maternal nutrition, hygiene and infant care and have again blossomed into activity. The young father is lost in the whirl. Does the primipara's doctor owe a little time to the father in pointing out to him the new and all important responsibilities he now approaches in his life? What is more significant to the formation and education of family life for the wedded couple than the appearance of the first child? I ask these questions because a personal discussion of a primipara's pelvimetry films with the expectant father could be made the opening wedge in introducing the male character to his life's new responsibilities. It's up to the individual physician whether or not he wishes to take a rôle in this particular phase of forgotten medicine.

Summary

1. A practical three film erect x-ray pelvimetry technic applicable to general x-ray departments is described.

2. With x-ray equipment of adequate capacity and attention to distance and filter factors the procedure is simple and safe.

3. Certain scientific medical information can be given accurately in all cases x-rayed.

4. A listing of less accurate data, such as child weight, age and viability and other limitations of

(Continued on Page 292)

A Page from Medical History

I. In the Beginning

John E. Summers, M.D.
Lansing, Michigan

MYSTERY, MAGIC, and medicine; in the beginning they were one and the same, and the healing methods that thousands of years ago sprang up and were developed by one group of primitive savage people were the same type as those developed by all others. In principle they are the same kind that are practiced today by native people in the vastness of Africa and in all other remote and uncivilized regions.

For primitive, or ancient, medicine is the expression of a philosophy that grows from the natural reactions of all ignorant men placed in hazardous surroundings. In the early days, long before civilization had developed, savage man was not, as some people believe, a carefree creature living a free and idealistic life in the midst of an abundant Eden. Instead this ancient ancestor of ours was a terror-driven, ignorant savage facing a hostile world. By day he slunk through the rough woods in search of food, in constant fear of death by stronger men and beasts. In the dark he hid from unseen terrors, and in his nakedness, he shivered in the cold of night. He trembled before the lightning and fell prostrate before the thunder. When convulsed in the agony of disease, he hid like a dumb beast. Injured, he crawled to his lair to die by hunger or be murdered by ruthless enemies. Even as he crouched and shivered in a world to which he was ill-suited physically, he sought an explanation for his plight. He was ignorant, but he was intelligent."[3]

While the habits of early man have conspired to cheat us of our full record in the fossils of the earth's crust, his artifacts (tools and weapons) have given us a good idea of prehistoric human life. The oldest of all known human remains is that of Pithecanthropus erectus, discovered in Java in 1891. The Java man had a brain volume of 985 cc; the brain volume of the largest great apes is about 600 cc, while that of the Australian bushman, the lowest type of living race, is 1240 cc. A more advanced race is represented by the Peking man discovered near Peking, China, in 1928. These races lived in the early Paleolithic age over 500,000 years ago.

Remains of the Heidelberg man were discovered in 1907 in river gravels near Heidelberg, Germany. Best known of all of the extinct species of man is Homo Neanderthalensis (Fig. 1). Remains of the Neanderthals were first found in the Neanderthal Valley near Düsseldorf, Germany, in 1858. Since then many skeletal remains of men, women and children have been found in the caves of Belgium, France, Italy, Spain, Croatia, Crimea, Palestine, Asia Minor, North Africa, Syria, Northern Arabia, Iraq and China.[8] The Neanderthal man's brain volume was 1400 to 1600 cc. This race of men made and used the stone ax, scraper and flint-tipped spear. There is evidence that he used fire. The Neanderthals lived from about 150,000 to 25,000 years B. C., and were replaced by the modern species, Homo sapiens. About 25,000 years B. C., the Cro-magnon race (named for the original discovery of five skeletons at the rock shelter of Cro-Magnon in the French village of Les Eyzies, Dordogne) from which the modern race of man have developed, replaced the Neanderthals. The Cro-Magnon people represented the last of the paleolithic races and gave way to modern races (Neolithic). The early races of man designated as paleolithic were characterized by the use of rudely made tools of stone while the neolithic races made tools of great beauty and delicacy. The latter races polished their implements.[8]

The Stone Age includes the history of man up until he learned to use metals. Thus in western Europe the stone age ended when metals came into use. In the Pacific Islands, the Stone Age was in progress when the white man reached there. In North America the Stone Age continued among some Indian tribes until the last century. In several parts of the world today, as in South America and Central Australia, many tribes still live in the Stone Age.

Available evidence indicates that man evolved in the Old World and migrated during the latter part of the Pleistocene epoch, over 25,000 years ago, to North America.

The study of the cultures of the many primitive tribes recently, inhabiting various parts of the earth, gives us some idea of what primitive healing methods consisted. Further, the similarity of the proceedings of the Siberian shaman, the North American medicineman, and the African "doctor"

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constitutes evidence that, at a remote prehistoric time, the ancestors of the present aborigines of the various parts of the world inhabited a common home where they cultivated a common tradition

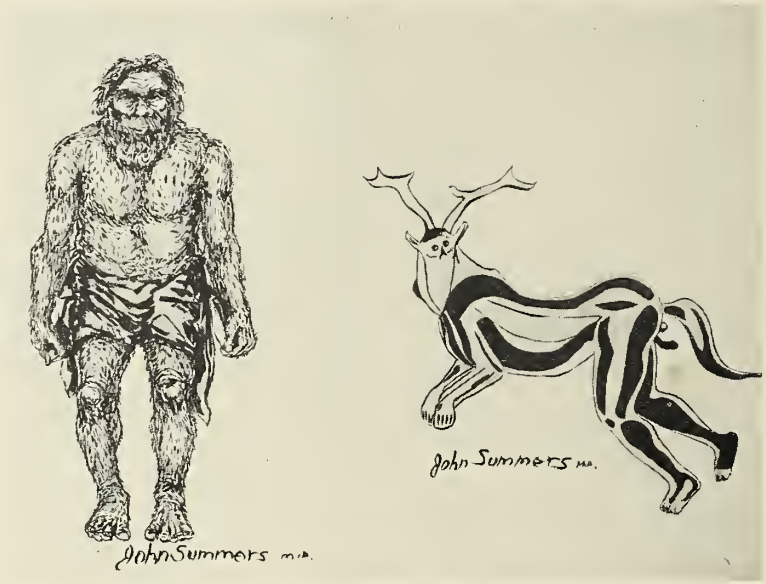


Fig. 1. Neanderthal Man. Homo neanderthalensis lived during the latter part of the Pleistocene epoch from about 150,000 B.C. to 25,000, B.C. Many skeletons have been found throughout the world. They were short of stature, the spine lacked the cervical curvature, the thigh bones were sigmoidally curved and the great toe was offset against the rest as in the great apes. The brain volume approximated that of modern man (1400-1600 cc.). Schuchert and Dembar).

Fig. 2. The Sorcerer. The Crô-Magnon race, from which all modern races have directly descended were the first, we believe, who attempted to care for their sick. The Sorcerer, the oldest record of a doctor or shaman, was drawn about 20,000 years ago. It was discovered in one of the caverns in the French Pyrenees by the three sons of Count Begouen (since known as Trois Frères in honor of the three brothers). (Gordon).

and when separated by a series of migrations, they carried along with them their old customs and practices.[1]

The oldest known picture of a doctor was drawn on the wall of a cavern in the French Pyrenees about 20,000 years ago. The bones and artifacts discovered in these caves revealed that these Cro-Magnon people did not practice agriculture or domestication of animals. The picture now called "The Sorcerer" depicts the figure of a medicine man of the early Stone Age wearing a deerskin about his body, antlers of a reindeer on his head and mittens on his hands. His ears appear like those of a bear. A long flowing beard and a tail of a horse complete his costume (Fig. 2).[1]

Medical practice in those early days was probably much like that of the Indian medicine man as observed among the Senecas and Tuscaroras by John Lawson: "As soon as the doctor comes into the cabin, the sick person is set on a mat or skin, stark naked except for some trifle that covers their nakedness when ripe, otherwise, in very young children there is nothing about them. In this manner the patient lies when the conjurer appears and the King of that nation comes to attend him with a rattle made of a gourd with peas in it. This the King delivers into the doctor's hand, whilst another brings a bowl of water and sets it down. Then the doctor begins and utters some few words very softly; afterwards he smells of the patient's navel and belly; and sometimes scarifies him a little with a flint or an instrument made of rattle snake teeth for this purpose; then he sucks the patient and gets out a mouthful of blood and serum, but serum chiefly, which perhaps may be a better method in many cases then to take away great quantities of blood, as is commonly practiced, which he spits in the bowl of water. Then he begins to mutter and talk apace, and at last to cut capers and clap his hands on his breech and sides,

till he gets into a sweat, so that a stranger would think that he was running mad, now and then sucking the patient, and so at times keeps sucking till he has got a great quantity of very ill-colored matter out of the belly, arms, breast, forehead, temples, neck and moist parts, still continuing his grimaces and antic postures which are not to be matched in Bedlam. At last you will see the doctor all over of a dropping sweat, and scarce able to utter one word, having quite spent himself; then he will cease for awhile, and so begin again till he comes in the same pitch of raving and seeming madness as before; all this time the sick body never so much as moves, although doubtless the lancing and sucking must be a great punishment to them, but they certainly are the patientest and most steady people under any burden that I ever saw in my life. At last the conjurer makes an end, and tells the patient's friends whether the patient will live or die; and then one that waits at this ceremony takes the blood away which remains in a lump in the middle of the water, and buries it in the ground in a place unknown to anyone but he that inters it."[5]

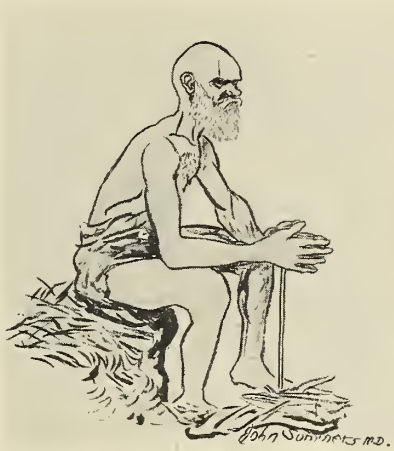




Fig. 3. Australian aborigine using fire drill. In some of these tribes the stone age is still in progress (from photograph by Thomas). Many interesting photographs of the Australian aborigine and his environment are shown in Thomas and Porteus.

Fig. 4. Magic played a large role in the lives of primitive people. "Pointing" is one of the ordinary ways of killing or injuring an enemy by the Australian aborigine. From photograph by Porteus.

Among ancient peoples, disease had a spiritual etiology. This is seen today among primitive tribes. In upper Burma, cholera and small pox are devils that lurk in the fog and filth. The Koreans scare away the devils of typhus, cholera and small pox by beating drums, pots and pans. In China, the and Polynesia, disease is due to an offended spirit which has to be propitiated by sacrifices. Natives of Australia attribute disease and death to black magic perpetrated by persons who wish them harm.[1] In this connection, throughout the ages, many thousands of people have been convicted and executed of witchcraft culminating in this country in the notorious Salem Witchcraft Trials and executions in 1692.[4] Among the Melanesians at New Guinea diseases are thought to emanate from sorcerers. In Bombay, illness arises from the action of an evil spirit or an offended deity[1]

To deal with these evil spirits is the task of the medicineman, shaman, wizard, doctor, exorcist or magician. The early doctor was frequently the priest as well. The therapeutic role of the doctor in ancient times is expressed in the old adage, "Nature cures the disease while the remedy amuses the patient."

"Shaman" signifies magician or medicineman; he works cures by magic. His efficacy depends upon his ability of communicating with the invisible powers and departed spirits and receiving from them revelations. The shaman, in order to contact these forces, puts himself into a state of nervous excitement, in which his mouth froths and his limbs

are convulsed. Epileptics and deformed men and women were frequently selected to be the medicineman among the Indian tribes.[1]

The main difference in the performance between the Siberian shaman and the North American medicine man is that the former uses a magic drum, the latter a magic rattle. Both wear fantastically decorated dress.



Fig. 5. Ojibwa Medicineman removing disease by sucking. Becoming a medicineman among the Ojibwa was not easy as Hoffman relates in "The Midē'wiwin or "Grand Medicine Society" of the Ojibway (Powell).

Study of the aboriginal races of Australia is quite interesting as they represent the most primitive peoples now existing on the earth. The following measurements of comparative brain volumes are taken from Porteus[6] and show the relationship of the Australian aborigines to other races.

Anthropoid apes	621 cc.
Pithecanthropus erectus	855 cc.
Vedas of Ceylon	1,277 cc.
Andaman Islanders (males)	1,300 cc.
Australian Aborigines	1,340 cc.
Negroes	1,350 cc.
Ainus (Northern Japan)	1,462 cc.
Europeans	1,490 cc.

The aboriginal Australian medicinemen were subjected to a rigorous program prior to their acceptance. For example, one medicineman related that prior to receiving the privilege to practise, "a very old medicineman came and threw some of his atnongara stones at him with a spear-thrower; some hit him on the chest, others went right through his head from ear to ear, killing him. The old man then cut out all his insides, heart, liver, lungs, everything, and left him lying on the ground; next morning he put some more stones into him, and covered his face with leaves. Then he sang over him till his body was all swollen up. Finally he fitted him out with a set of new clothes and patted him on the head, whereat he jumped up a medicineman."[7]

The Australian Bushman medicineman used various forms of magic, also herbs and blood letting. While they had many magical rituals, a very fatal one was known as "pointing." "In the Aruntа tribe are employed for this purpose short pieces of sticks or bones, one end of which is sharpened; they may have a piece of gum on the other end, or be decorated with down or have designs burned upon them; that is immaterial. When a man wishes to 'point' his enemy, he goes away to some lonely spot, and crouching down over his stick or bone, he repeats a curse: 'May your heart be rent asunder'; or 'May your head and throat be split open.' This done he returns to the camp, leaving his bone stuck in the ground; some time afterwards he brings it back to the camp and hides it. Then one evening he goes out and gets it, then creeps up till he can see his victim's features by the light of the camp fire, stoops down, and turns his back towards the camp. He then takes the irna or bone in both hands and jerks it repeatedly over his shoulder, repeating his curses as he does so. The evil magic then goes straight to the victim, who sickens and dies without apparent cause, unless some medicineman can remove the cause of the sickness."[10]



Fig. 6. Illustration of a prehistoric boy undergoing trephining for some type of disease. Trephining was practiced by many primitive tribes as shown by the large number of skulls formed throughout the world (Guthric). The medicineman was called in for major disease primarily while many folk remedies were used for minor illnessess. Charms, amulets, talismans, baths, massage and many lesser rituals were common.

Primitive man also practiced trephining and many skulls have been found throughout the world

with one or more holes in the calvarium. That many of the patients who underwent trephining survived is evidenced by the healing of the edges of the holes. Trephining is also practiced by modern primitive tribes.[2]

Thus in seeking the origin of medical practice in prehistoric times we may assume that the cures of injuries and diseases followed two distinct lines. "The first, based upon magical or religious beliefs, consisted in dealing with the 'soul' of the patient or in persuading or forcing the evil spirit in the body of the patient to depart. The second, at first, applied only to minor disorders, was of the nature of domestic or folk medicine, much of which has persisted to the present day even in civilized communities.

"The two methods became intermingled in course of time. The operation of trephining, for example, originally practiced to allow a demon to escape, was ultimately applied to cases of depressed fractures, and still later to many other intracranial lesions. It is noteworthy also, that while folk medicine includes many remedies, some rational, others most irrational, it is closely bound up with superstitions, incantations, and other forms of magic, showing that the original conception of disease as a supernatural phenomenon has persisted throughout the centuries since Neolithic times."[2]

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POLIOMYELITIS EXPERIENCE AT HERMAN KIEFER HOSPITAL

(Continued from Page 281)

cephalitis, while nine others presented evidence of encephalitis with other involvement.

Respirator Cases.—Sixty-one cases required respirator support which represented 6.7 per cent of the total admissions, twenty-eight of whom were males and thirty-three females. Thirty-five (57.4 per cent) of all the respirator cases, were found in the 20+ year age group, fourteen males and twenty-one females. One of the respirator cases was less than one year of age.

Relation of Menstruation to Poliomyelitis.—Thirty-seven (32.7 per cent) of all females of menstrual age were menstruating or about to menstruate at the time of admission. This was more than twice the expected number, statistically speaking, and closely approximated the 30 per cent figure of the previous year. An additional thirty-two patients were pregnant on admission and four very recently delivered. These will be more adequately analyzed in a later paper.

Case Fatality Rate.—Poliomyelitis fatalities for 1952 numbered fifty-two (5.8 per cent) of all cases admitted, with an even distribution between the sexes. Twenty-five (48.1 per cent) of all fatalities were in patients of the 20+ year age group, eleven male and fourteen female.

Summary

In the 1952 season, more patients with poliomyelitis were admitted to Herman Kiefer Hospital than in any previous year. The ever-changing pattern of the disease noted in other years was again evident in 1952. The annual epidemic was also noteworthy for the high incidence of paralyzed cases, as well as the amount of paralysis in the individual patient. The proportion of adult patients was lower than in previous years. The current year was the eighth consecutive year in which the number of cases of poliomyelitis in the Detroit area greatly exceeded the so-called endemic level for the disease.

1151 Taylor Ave. (Dr. Young)

St. Luke's Hospital Clinico-Pathologic Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan

Clinical Record

THE PATIENT was a white man, forty-six years old, who was well until five days before entering the hospital. At that time, he noted shortness of breath on climbing stairs. Dyspnea became progressively more severe and was soon experienced in the performance of his routine labor as a metal sharpener. Two days before hospital admission, the patient suddenly awoke from sound sleep because of severe shortness of breath. There was marked apprehension and he was compelled to sit up before the open window in order to calm himself and get his breath. There had been no previous similar episode. Thereafter, dyspnea continued to be progressive. During the past several years, there had been occasional slight dyspnea and edema of the ankles associated with the heavy manual labor of woodcutting. At all other times, he had been well and there had been no cough, hemoptysis, epistaxis, orthopnea, chest pain, hypertension, joint pain, polyuria or nocturia. The patient denied having had rheumatic fever, scarlet fever, diphtheria, or cardiac, pulmonary, or genito-urinary disease.

Physical examination revealed a well developed and poorly nourished, white man in no acute distress. The temperature was 98.4°F., respirations 22, pulse 94, and blood pressure 110/100 mm. Hg. The left eye was replaced by a prosthesis and the right eye perceived light only through a translucent lens that precluded funduscopic examination. The neck veins were distended and displayed a pulsation synchronous with the systolic beat. The chest was symmetrical and auscultation revealed crepitant râles over the right posterior base. The left border of cardiac dullness was percussed 2 cm. to the left of the midclavicular line in the fifth intercostal space. The point of maximal impulse was visible in this region. Palpation disclosed no thrill. Auscultation revealed a harsh and high pitched systolic murmur in the aortic area, transmitted over the entire precordium, that obscured all other sounds. A diastolic component was equivocal. Second heart sounds were faintly audible in all but the aortic area. The abdomen was flat and there was slight tenderness in the midepigastrium and right upper quadrant. No organs or masses were palpated. The extremities were symmetrical and revealed cyanosis of the nail beds of fingers and toes, and reduced pulse pressure of radial, popliteal, and posterior tibial arteries. There was no edema or clubbing of fingers and toes.

The urine was yellow, cloudy, acid, and of specific gravity 1.016. There were two plus proteinuria, and occasional leukocytes, 3 to 5 erythrocytes, 20 to 25 epithelial cells, and 3 to 5 granular casts per high power field of sediment. Hematologic examination revealed 16.4 grams of hemoglobin per 100 cc. There were 4,730,000 erythrocytes, and 8,250 leukocytes per cu. mm. Differential count of 100 cells revealed 71 segmented granulocytes, 1 band cell, 25 lymphocytes, and 3 eosinophils. The sedimentation rate was 27 mm. in sixty minutes. The Kahn serologic test for syphilis was negative. The tuberculin skin test, 1:10,000, was negative. The nonprotein nitrogen was 55 mg. per 100 cc. An electrocardiogram was interpreted as showing cardiac disease without specificity as to type or location. Chest x-ray revealed enlargement of the left ventricle and fine granular opacities throughout the midportions of both lung fields. An opacity resembling calcium was seen in the region of the aortic valve. The pulse rose to 120 and dyspnea became pronounced. The patient was digitalized and oxygen was given. Nausea developed. Death occurred after twelve days in the hospital.

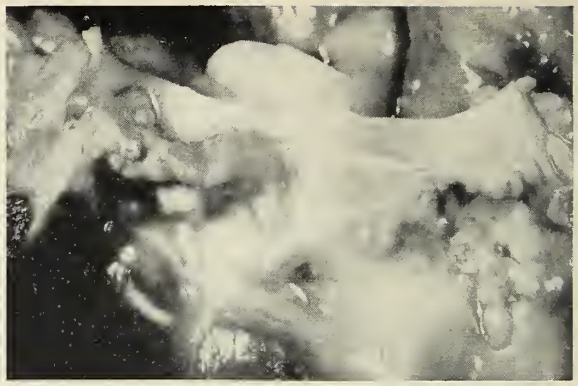


Fig. 1. Calcific disease of aortic valve.

Discussion

Dr. D. P. Gage.—The essential features of this case include a harsh systolic murmur over the aortic area, the x-ray demonstration of calcium in the aortic valve, a markedly reduced pulse pressure, and an illness of five days' duration terminating in cardiac failure. This is strong evidence for a clinical diagnosis of calcific disease of the aortic valve. However, caution should be exercised for several reasons. The patient was young for calcific aortic stenosis, the illness is of remarkably short duration, the heart is not markedly enlarged, and the diastolic pressure is well maintained. There is also absence of an aortic thrill. Nevertheless, calcific disease of the aortic valve does occur under the age of fifty years, and it is known that patients with deforming aortic valve disease are often clinically well until the terminal phase. Although the heart does not appear markedly enlarged in the x-ray, considerable thickening and increased weight may be masked by absence of dilatation. Finally, stenosis is not necessarily accompanied by clinically evident insufficiency. Thus, obstruction to the aortic outlet is expressed by low systolic pressure, and marked stenosis prevents pronounced regurgitation of blood back into the left ventricle. This would explain the blood pressure of 110/100 mm. Hg, account for the maintenance of the diastolic component, and provide for the marked reduction of pulse pressure.

Congestive heart failure of progressive type with death in a period of five days may occur in other conditions. Non-calcifying rheumatic aortic valvulitis with stenosis occurs in younger patients, there are usually signs of mitral stenosis, and a clear history of polyarthritis, chorea,

or tonsillitis is usually obtainable. Coronary thrombosis with infarction may precipitate rapidly progressive failure. However, there was no pain, no leukocytosis, and no characteristic abnormality of the electrocardiogram. Dissecting aneurysm of the aorta may rupture back into the pericardium with tamponade, low pulse pressure, and progressive failure. However, pain is a prominent sign and the cardiac silhouette is usually large and of globular outline. Bacterial endocarditis of the aortic valve may be manifested by progressive failure of abrupt onset, particularly with rupture of an aortic cusp. However, the patient is usually febrile, leukocytosis is common, and there is often a history of rheumatic heart disease. Despite all of these considerations, I am reasonably confident of the clinical diagnosis of calcific disease of the aortic valve with stenosis.

Dr. Gage's Diagnosis

Calcific disease of aortic valve with stenosis.

Anatomic Diagnoses

Calcific disease of aortic valve with stenosis. Hypertrophy and dilatation of heart (435 gms.). Chronic passive hyperemia of lungs. Congestive cirrhosis of liver.

Dr. J. C. Smith.—Autopsy disclosed large nodular calcific deposits of the aortic valve with advanced stenosis (Fig. 1). Two cusps were fused to form an acquired bicuspid state. Deforming disease of other valves was absent. The lungs were hyperemic, the right ventricle was dilated, and congestive cirrhosis distorted the lobular pattern of the liver. Death is attributed to failure of the left ventricle.

Karsner and Koletsky[1] reviewed the hearts of 200 cases of calcific aortic stenosis. Three-fourths of the cases occurred after the age of fifty. The cardinal clinical features included a thrill and harsh murmur over the aortic area, reduced pulse pressure, and absence of the aortic second sound. Cardiac enlargement was often prominent, and the diagnosis was considered established when, in the presence of these clinical signs, calcification was demonstrated in the aortic valve.

Their main objective was to determine whether calcific aortic stenosis was the result of degenerative changes, or the result of previous rheumatic carditis. Vascularity, fibrosis, and exudative changes of the valves or endocardium of the left atrium, characteristic of rheumatic disease, were found in 196 of the 200 hearts. They concluded that rheumatic disease was the cause of calcific aortic stenosis and believed that the small number of cases in which this relationship was not proved did not detract from the validity of the general statement.

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MOBILE SERVICE OF MICHIGAN EPILEPSY CENTER—BOHN

(Continued from Page 271)

More effective means of communication and smoother, swifter expediting are being gradually developed each year the service is rendered.

Physicians have been keenly receptive to the mobile service from the standpoint of what practical contribution it might make to more successful treatment of their epileptic patients. In this regard, they sought clarification of the relationship of EEG to therapy. Cases referred represented clinically diagnosed epileptics, patients suspected of epilepsy, cerebral palsies, tumor suspects. Remarkably few appointments were broken, either for EEG or the neurological examinations. Later tabulation revealed that about two-thirds of the patients had abnormal EEGs. This corresponds with percentages from EEG laboratories serving an unselected group of patients (not all diagnostically clearly convulsive). The fact that 15 per cent of epileptics show normal tracings likewise influences this figure. Subsequent to the mobile visit, one area obtained its own EEG installation and another showed keen interest in doing so.

Conferences were well attended by physicians and interest in newer techniques and therapies was keen.

It has of course not been possible as yet, except for occasional cases, to do follow-up of physicians or patients in areas thus far covered.

Experience has clarified: (1) where the physician enthusiasm and response is greatest, (2) from what areas the largest number of referrals are drawn, (3) where it will prove most fruitful to concentrate future efforts.

The objective during the next two years is to meet more effectively the growing interest in the mobile service, to fill the singular needs of local communities in their work with epileptics, and to facilitate a more completely psychosomatic program.

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Detroit Physiological Society

Meeting of December 10, 1953

The Reversibility of Otherwise Fatal Air Embolism of the Coronary Arteries

Thomas Geoghegan and Conrad R. Lam
The Henry Ford Hospital, Detroit, Michigan

Entrance of even small amounts of air into the left heart during open cardiac operations is usually fatal. A series of experiments were done upon dogs to determine if the cause of death from left heart air was due to cerebral air embolism, air in the coronary arteries, or mechanical pump failure of the left ventricle from the compressible bolus of air. Air injected into the common carotid arteries of respirated dogs did not produce immediate death but did result in severe neurological damage. Air in a balloon in the cavity of the left ventricle caused no change in the circulatory dynamics. Air entering the coronary arteries after being injected into the left ventricular cavity directly was followed by a precipitous fall in the aortic blood pressure. The coronary circulation was interrupted as the air in the coronary arteries damped out the effective pressure head. Resuscitation of hearts following administration of a uniformly fatal dose (1.5 cc. per kilogram) of left heart air was attempted. The air could be forced through the coronary tree by producing a high pressure at the coronary ostia. This was achieved by clamping the arch of the aorta and applying manual systole. Following an otherwise fatal dose of left heart air, eighty-five per cent of the hearts were successfully revived.

Essential Cryoglobulinemia

George S. Fisher and Milton J. Steinhardt

Cold precipitable protein which has been given the designation cryoglobulin by Lerner and Watson, is found with some frequency associated especially with multiple myeloma. Small amounts of the substance have also been observed in the blood serum of patients with hepatic disease, bacterial endocarditis, periarteritis, and familial telangiectasia.

A case is here presented of a patient with large amounts of cryoglobulin in the plasma, and a long history of cold sensitivity manifesting itself as hemorrhage, acropurpura, ulceration, and urticarial reaction on surfaces exposed to cold. Since a few instances of this disease are present in the medical literature which fall into a symptom complex similar to the above, it is suggested that the condition be given the term: Essential Cryoglobulinemia.

Some of the physical and physiologic aspects of the cryoglobulin are demonstrated.

ROUTINE USE OF X-RAY PELVIMETRY

(Continued from Page 284)

knowledge to be gleaned from this routine technique, are recorded.

5. Certain medical and economic advantages are discussed in considering the application of such a routine x-ray pelvimetry procedure for all primiparas.

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458 W. South Street

Goodwill

"Goodwill is the tendency of the satisfied customer to return to the place where he has been well treated."

—United States Supreme Court

Doctor, your satisfied patient is, after all, your and the medical profession's best booster. Let us, as medical doctors, not forget that we as individuals are our own best public relations experts, our own best envoys of goodwill.

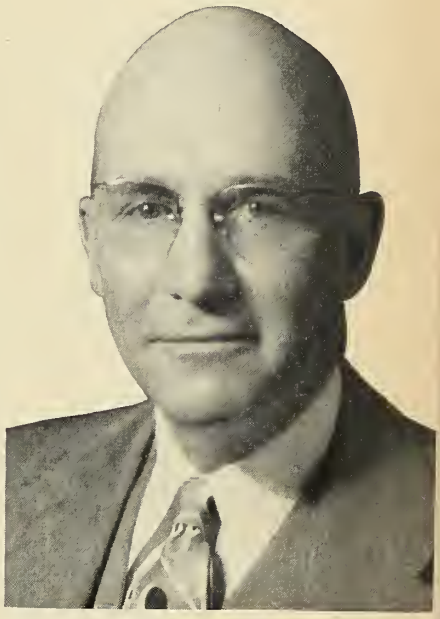
The practice of medicine has been changing scientifically very rapidly, as we all know, and it is changing just as rapidly economically. If you are wise you will keep up with it. Health insurance has brought many thousands to our offices from the assembly lines of the free clinics. These thousands do not want to return to those lines if they can help it and they won't if they are treated fairly and squarely.

The normal, healthy competition for patients amongst ourselves is increasing. In addition government agencies, philanthropic foundations, health and rehabilitation centers and other groups are moving more and more into the practice of medicine. The cults will always be with us under one name or another.

You and I believe that the time-honored method of the practice of medicine is the best personal service. We know we can give better medical care than any mass production outfit is capable of providing. A little more time spent with our patients, a little more personal interest in the individual is not hard to give and will pay dividends. The baker's dozen has always brought goodwill.

Quality in medical care is what the American people demand just as they demand it in products they purchase in the market place. Let's be sure that they get it. Be good, do good, and then let our public relations experts talk about it.

President's Message



L. W. Hull

President, Michigan State Medical Society

Editorial

PRESIDENT EISENHOWER'S HEALTH PLANS

ON JANUARY 14, 1954, the President, in a special message to Congress, called for changes in the Social Security laws to provide (1) mandatory coverage of physicians, lawyers, dentists and most other self-employed persons to an estimated ten million, (2) waiver of Old Age and Survivors Insurance premiums for the disabled, and (3) greater emphasis on the rehabilitation of the handicapped.

On Monday, January 18, 1954, the President sent to Congress his special message on his Health Program. He stated specifically: "The best way for most of our people to obtain good medical care is to participate in voluntary health insurance plans." He proposed (1) creating a $25,000,000 fund to reinsure health insurance plans against "the special additional risks" of expanding benefits for their members; (2) a five-year plan to restore 600,000 disabled persons to productive work; (3) greater federal aid for states and localities in building hospitals for the chronically ill; to provide for construction of non-profit clinics, rehabilitation centers for the disabled, and nursing and convalescent homes; (4) continuing present activities of the Public Health Service; (5) simplifying the formula for grants of government money for health, child welfare, and other programs to make it more responsive to the needs of the states and their citizens. "While continuing to reject government regulation of medicine, we shall with vigor and imagination continuously search out by appropriate means, recommend and put into effect, new methods of achieving better health for all of our people."

The expressed desire of the profession to stay out of Social Security was ignored.

The President said the government itself should not provide health insurance, but it can and should work with private non-profit insurance organizations toward obtaining better protection for the people.

Such is the program so far announced. Certain officials of the American Medical Association were invited in, just two hours before its release, to hear the President's Health Program announcement. So far as we are able to learn, the medical profession was not consulted in the preparation of this Health Program.

MEDICINE'S REACTION

REGARDING mandatory coverage of physicians, lawyers, dentists and other self-employed persons in Social Security—the President's first proposition, our comment is that the American medical profession and other self-employed groups and professions have repeatedly asked to be excluded from compulsory social security. If allowed certain advantages given to industrial executives we could and would provide far better for our old age, and for living after retirement. For years, we have discussed the Jenkins-Keough (Reid) Bills which would allow professional people to use a certain percentage of their income to purchase designated investments to provide annuities after retirement, and to deduct the costs as a business expense before income taxes are determined. Industry now has that right.

Proposition number two, the waiver of Old Age and Survivors Insurance premiums for the disabled needs no argument. Several bills have been introduced and we believe they are worthy.

Rehabilitation

The third proposition of the President's plan for the better health of the nation, the rehabilitation of the handicapped, has been the bane of the whole profession and the Department of Social Welfare of the State, under which the work must be done; although great strides are being made where funds and facilities are available, much effort and many plans have been made, but not much has been accomplished. One important stumbling block is to determine what constitutes a handicapped person.

Federal legislation is needed to actuate this work. In Michigan, plans have been made, only to be rejected in Washington.

"Reinsurance"

The President on January 18, 1954, divided his program into five sections. We shall consider them in order. The first was "reinsurance." As first announced, the President's reinsurance program

sounded great, and received many commendatory editorial comments. The first impression, and his word, was that some project was intended to reimburse the voluntary plans against the special additional risks in giving the insured persons additional benefits. That is what he said; that is the way the commentators, Lowell Thomas, Fulton Lewis, Jr., and the metropolitan editors all understood, and the lay and press response was entirely favorable.

The President's reinsurance plan has not yet been given to us, but just a few days earlier Congressman Wolverton of New Jersey, Chairman of the Committee on Interstate and Foreign Commerce, introduced his bill (H.R. 6949) on reinsurance, which we may presume has the President's thought.

The reinsurance program is patterned on the Federal Deposit Insurance Corporation which insures deposits in the national banks throughout the country. The FDIC is not compulsory, but demand makes it mandatory. The banks pay one-tenth of one per cent of all deposits into the Federal Corporation, and in return all their depositors are insured up to $10,000.00. That makes another bureau with many employes, and very few claims.

President Eisenhower has not yet spelled out his program, but Congressman Wolverton in H.B. 6949 has given us the preview. His Bill establishes a Corporation similar to the FDIC, the Federal Health Reinsurance Corporation. This scheme is for the use of the private non-profit health plans, but we understand the President intends the inclusion of other health insurance plans as well. Under Wolverton's plan, a service organization must pay two per cent of all premium receipts, and will be insured for three-quarters of the expense against any case in which the costs are more than one thousand dollars in any one year. This is to protect against the catastrophic case. To apply for these benefits, the plan, in addition, must pay one per cent of the total premiums received during the preceding year.

At the national conference of Blue Shield plans held in Chicago, January 16 and 17, 1954, the Wolverton Bill was abstracted. The Blue Shield plan representatives who were in attendance were asked which ones had had cases costing more than $1,000.00 in any one year. There were about seven. Michigan Medical Service, in our fourteen years of operation, and paying our doctors about $120,000,000, has never had such a claim. Michigan Medical Service would not have benefited last year had the FHRC been in operation, but we would have paid into the corporation over $220,000 for the privilege of belonging, and $560,000 for the year's protection. Michigan Hospital Service had several cases, but the costs of FHRC would have been excessive.

The President said his Reinsurance Corporation would need from $25,000,000 to $50,000,000 to start, but in the end would make that back from the fees paid by the plans. Looks as if the government might be planning on another source of income, and that to be taken from the non-profit voluntary health plans which have made such a contribution to the good health of our people. They were able to demonstrate that the supposedly impossible insuring scheme could be made a success when a group of devoted workers in the profession were willing to give their time and effort.

We want to be independent of government "benefits."

Proposition number two of the President's detailed plans has been considered already—rehabilitation of the handicapped.

Care of Needy

The President's third proposal reads: "Greater Federal aid for States and localities in building hospitals for the chronically ill, to provide for construction of non-profit clinics, rehabilitation centers for the disabled, and nursing and convalescent homes." This is a broad subject which sounds in some places like a nationalization of the Kaiser and HIP schemes of medical care. We do not like clinics in this sense. We do not see why medical care should be non-profit. True, we have built our great service plans of Blue Shield and Blue Cross on that principle, but only in relation to the costs of establishing our operations and in administration, not in the payments to the doctors or hospitals. These plans were developed primarily for the low income groups of people, and have been extended with certain relaxations in the handling of cases. In over-income persons, the right of making a customary charge is retained if the doctor feels the group rate is insufficient. That would not hold in a government-operated clinic. The latter sounds like doctors on salaries.

This part of our nation's program will bear much careful scrutiny. We could be working toward a

millenium, but we could be working toward a great advance in certain forms of socialized medicine. We know the President is "opposed to socialized medicine." If we remember correctly, Harry Truman and Oscar Ewing were also "opposed to socialized medicine," but their definition was different from ours.

We all agree with proposition four to continue the work of the Public Health Service.

Grants-in-aid More Responsive

The fifth part of the President's program for the better health of the nation: "simplifying the formula for grants of government money for health, child welfare and other programs to make it more responsive to the needs of the states and their citizens" has promise of far-reaching benefits. Under present regulations, the Michigan Department of Social Welfare is unable to pay doctors for the care given to old age assistance beneficiaries, or aid to dependent children. A relaxation was made about three years ago, allowing the department to contract with an organization for this care, but payments cannot be made to individuals. At present, the department can allow increased amounts up to a specified limit, to be paid to the recipient of care as an addition to the monthly relief check. Whether the doctor or the hospital gets the money is up to the old age assistant's recipient or the dependent child's guardian.

A Workable Idea

Conforming to the above-mentioned relaxation rule, the Calhoun County Medical Society three years ago negotiated with the Michigan Department of Social Welfare looking to a method of caring for the old age assistance and dependent children beneficiaries. The department had been conferring with Michigan Medical Service, but could get nowhere because the insurance principle could not be recognized, and the Medical Service could not assume the risks asked. The Calhoun County Medical Society was willing, however, to gamble its services on a county wide basis to determine what the insurance risk might be. A workable program was adopted and ready to actuate when the Federal Government disapproved arbitrarily, saying the plan seemed to be according to stipulations but was believed not to be feasible. The Federal Government, as we all know, supplies half of the funds administered by the Michigan Department.

A SUGGESTED SOLUTION

THE PRESIDENT'S Plan, we believe, could be of great value, if the administration takes an attitude different from what has prevailed in the past. We believe plans could be formulated by the Government recognizing the insurance principle, granting its departments the right to use it, and specifying positively that the insuring of its wards is in no way a subsidy. The various branches of government, both national and local, which are charged with the care of indigents and the granting of relief, are by custom and by law responsible for these wards. If Government would take a note from the outmoded medical service bill Senator Taft proposed in opposition to the infamous Wagner-Murray-Dingell bills, permission could be granted to government departments to make salary withholdings for the so-called fringe benefits, especially health insurance.

If Government protected its wards by insurance in the voluntary non-profit plans, the people would get without question the same medical and hospital care all other insured persons receive. There would be no discrimination as now might be. Blue Shield and Blue Cross, we believe, would be glad to cooperate in such an effort, if guaranteed there would be no attempt to interfere with management. The Supreme Court decision should not apply, and would not if care is taken in developing the necessary legislation. Senator Taft had this vision, and many others. The work with the Veterans Administration in giving home-town care to service-connected veterans is slightly different. It is not insurance, but cost and expense, which could be used in welfare relief if necessary.

A favorable attitude from the Administration could be a great boon to the real solution of the growing problem. In Michigan alone, there are about 200,000 old age and aid to dependent children cases. These figures are three years old. In a recent study in Battle Creek the new Hospital Service Plan shows that 20 per cent of all hospital cases are recipients of relief in some form. The problem is worthy of the President's favorable action.

We hope and believe the unacceptable Wolverton reinsurance will be changed. Well-informed and experienced men working in Blue Cross and Blue Shield, as well as other insurance men, would without question be willing to help.

Michigan State Medical Society Past Presidents 1931-1939



From 1931 to 1939—a turbulent and restless period which ended in the outbreak of war in Europe—was a time of social and political revolution. Agree or not with the principles which evolved, these were interesting and tumultuous years; the dawn and high noon of the Roosevelt Era. As the pendulum swung in Michigan, the Governor's chair was filled by a series of one-term occupants: Brucker, Comstock, Fitzgerald, Murphy and back to Fitzgerald for a few weeks before his sudden death. A militant young group with the initials UAW was born, and in 1935 three more initials—CIO—were added. The eyes of the nation were on Michigan, as "sitdown" became a part of the American idiom. With the changing times, state government became a disbursement unit for many federal activities tagged "welfare programs" and the continuing struggle to keep medicine free was born. Here, in adverse times, the medical profession consolidated with new faith in American principles, while just ahead were the greatest years of scientific progress in history.

Wayne University College of Medicine

Postgraduate Continuation Courses

March 15—June 12, 1954

These courses are open to all qualified persons. Veterans receiving benefits under the G. I. Bill should contact Dr. Arthur Johnson, Veterans Administration at Wayne University, 5524 Cass Avenue. Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1401 Rivard.

ANATOMY			
Surgical Anatomy (Limited to 20 Senior Surgical Residents)	College of Medicine	Tues. 1-5	$50.00
Regional Anatomy			
Head and Neck	College of Medicine	Fri. 1-5	$50.00
Thorax, Abdomen & Pelvis	College of Medicine	Wed. 1-5	$50.00
Back and Extremities (Regional Anatomy open to graduates of dentistry)	College of Medicine	Thurs. 1-5	$50.00
Special Dissection (Depending upon availability of material—Contact Dr. Gardner)	College of Medicine	Tues. 1-5	$50.00
MICROBIOLOGY			
Parasitology and Medical Entomology	College of Medicine No. 207, 1512 St. Antoine	M. & W. 2-5	$50.00
Microbiology Seminar	College of Medicine	Thurs. 3:30-5	$15.00
PHYSIOLOGICAL CHEMISTRY			
Nutrition	College of Medicine	M. W. F. 11-12	$35.00
Methods and Metabolism	College of Medicine	T. W. Th. F. 8-12	$50.00
P. Chemistry Seminar	College of Medicine	Thurs. 3:30-4:30	$15.00
PHYSIOLOGY AND PHARMACOLOGY			
Seminar	College of Medicine	Tues. 4-5	$15.00
PATHOLOGY			
Advanced Hematology (Limited to 5)	College of Medicine	Mon. 1-5	$50.00
Pathology of Heart	College of Medicine	Wed. 1-5	$50.00
DERMATOLOGY			
Seminar in Dermatology	Receiving Hospital Farwell Annex	Wed. 10-12	$15.00
Seminar in Dermopathology	Receiving Hospital Dept. of Pathology	Fri. 1-2	$15.00
Deep Mycoses	Receiving Hospital 4th Fl. Lab.—Mycology	Wed. 12-2	$30.00
INTERNAL MEDICINE			
Medical Conference (Limit 15)	Receiving Hospital No. 243 Farwell Annex	Thurs. 5-6	$15.00
Gastroenterology Clinic (Limit 10)	Receiving Hospital No. 243 Farwell Annex	Sat. 8-9	$15.00
Medical Seminar	Receiving Hospital No. 243 Farwell Annex	Mon. 5-6	$15.00
Medical X-Ray Conference (Limit 10)	Receiving Hospital No. 243 Farwell Annex	1st, 3rd, 5th Tues. 11-12	$15.00
Medical Pathologic Conf. (Limit 10)	Receiving Hospital No. 243 Farwell Annex	Wed. 11-12	$15.00
Hematology Clinic	Receiving Hospital	Wed. 1-3	$15.00
SURGERY			
Seminar	College of Medicine 625 Mullett	Mon. 4-5	$15.00
ONCOLOGY			
Cancer Detection	Yates Clinic	Any day 3-5	$25.00
COMPREHENSIVE UNIT COURSE (Begins September, 1954)			
Basic Ophthalmology (Limited)	Kresge Eye Institute and Hospitals	Full Time (9 months)	$500.00

Applications should be sent immediately to the Postgraduate Department, College of Medicine, 1401 Rivard, Detroit 7, Michigan.

Michigan State Medical Society

Annual Session of the Council

January 29-30, 1954, Detroit

HIGHLIGHTS OF THE COUNCIL

- The auditors' report for 1953, and the budgets for 1954, were approved. See pages 301 and 307-309.
- Annual Reports of Secretary, Treasurer, and Editor were presented and approved.
- Reports of three Standing Committee of The Council, meetings of January 28, were presented and accepted.
- Secretary L. Fernald Foster, M.D., Bay City, Editor Wilfrid Haughey, M.D., Battle Creek, and Treasurer Wm. A. Hyland, M.D., Grand Rapids, were re-elected for 1954.
- Progress report on Michigan Medical Service was forwarded by R. L. Novy, M.D., Detroit, M.M.S. President; progress report on Michigan Hospital Service was presented by K. B. Babcock, M.D., Detroit, M.H.S. President.
- Annual reports of individual Councilors on condition of profession in their Districts—and on Beaumont Memorial Restoration Fund, by Otto O. Beck, M.D., Birmingham—were presented.
- Monthly reports of Council Chairman William Bromme, M.D., Detroit; President L. W. Hull, M.D., Detroit; Secretary L. Fernald Foster, M.D., Bay City; Rheumatic Fever Co-ordinator Leon DeVel, M.D., Grand Rapids; and Public Relations Counsel H. W. Brenneman, Lansing, were accepted.
- Mutual problems were discussed with Michigan Health Commissioner A. E. Heustis, M.D.
- Appointments: W. B. Prothro, M.D., Grand Rapids, to Rheumatic Fever Control Committee; G. A. Kamperman, M.D., Detroit, C. E. Toshach, M.D., Saginaw, and N. F. Miller, M.D., Ann Arbor, to Maternal Health Committee and M. H. Manning, M.D., Detroit, to Legislative Committee.
- Committee reports were presented by: (a) Arbitration, December 11; (b) Postgraduate Medical Education, January 7; (c) Preventive Medicine, January 7; (d) Basic Science Study, January 7; (e) Permanent Conference, January 13; (f) Tuberculosis Control, January 14; (g) Rheumatic Fever Control, January 20; (h) Medical Advisory to Michigan Hospital Service, January 20; (i) Michigan Cancer Co-ordinating, January 21; (j) Legislative, January 22; (k) Venereal Disease Control, January 27; (l) Mental Hygiene, January 28.
- A "Golden Goose" breakfast was scheduled for Thursday, March 11, at 7:00 a.m., English Room, Sheraton-Cadillac Hotel, Detroit; all Michigan Clinical Institute registrants to be invited to attend.
- MSMS representatives: M. R. Burnell, M.D., and E. F. Lutz, M.D., Detroit, were appointed to attend the Congress on Industrial Health and Conference on Management and Union Sponsored Health Centers, both meetings in Louisville, February 23-25; William Bromme, M.D., Detroit, was authorized to attend AMA Regional Conference on Veterans with Non-Service Connected Disabilities, Indianapolis, March 21; and H. W. Bird, M.D., Detroit, was authorized to attend the National Governors Conference on Mental Health, Detroit, February 8-9.
- Appointments to Joint Study Commission on Reporting of Venereal Diseases, authorized by 1953 MSMS House of Delegates, were announced: nominations made by Michigan Department of Health: J. A. Cowan, M.D., and A. E. Heustis, M.D., Lansing; by the Michigan Health Officers Association: O. K. Engelke, M.D., Ann Arbor, and O. D. Stryker, M.D., Mt. Clemens; by the

Michigan Pathological Society: F. W. Hartman, M.D., and C. I. Owen, M.D., Detroit; from MSMS Council: B. M. Harris, M.D., Ypsilanti, and G. W. Slagle, M.D., Battle Creek; and from the Venereal Disease Control Committee: R. S. Breakey, M.D., Lansing, and L. W. Shaffer, M.D., Detroit.

- The Council decided to hold its second meeting of the September Council Session on the last day (Friday) of the Annual Session, beginning at 8:00 a.m.—rather than during the afternoon, as in the past.
- The Council approved Dr. A. E. Huestis' appointment of John R. Rodger, M.D., Bellaire, and Palmer E. Sutton, M.D., Royal Oak, to the State Health Commissioner's Hospital Committee in connection with Rules and Minimum Standards for Hospitals, as approved by the State Council of Health on December 8, 1953.
- The status of physicians who receive temporary licenses to practice was the subject of an opinion by Legal Counsel J. Joseph Herbert.

MEMBERSHIP RECORD—1953

COUNTY MEDICAL SOCIETY	PAID 1952	PAID 1953	SPECIAL MEMBERS Emeritus	SPECIAL MEMBERS Retired	SPECIAL MEMBERS Military	DEATHS 1952	DEATHS 1953	NET MEMBERSHIP 1952	NET MEMBERSHIP 1953	1953 Gain	1953 Loss	UNPAID 1952	UNPAID 1953
Allegan	20	22	1	—	1	1	1	22	23	1	—	—	—
Alpena, Alcona, Presque Isle	22	22	2	—	1	—	—	25	25	—	—	1	—
Barry	11	11	3	—	—	—	—	14	14	—	—	1	—
Bay, Arenac, Iosco	70	67	6	2	4	1	2	79	77	—	2	—	—
Berrien	74	76	1	1	6	—	1	78	83	5	—	3	—
Branch	19	21	3	—	—	—	—	21	24	3	—	1	—
Calhoun	93	102	12	—	13	1	2	123	125	2	—	3	—
Cass	11	10	1	—	—	1	—	11	11	—	—	—	—
Chippewa, Mackinac	21	22	3	—	1	—	—	25	26	1	—	—	—
Clinton	16	15	1	—	—	—	—	17	16	—	1	—	—
Delta-Schoolcraft	23	22	2	—	—	—	—	25	24	—	1	1	1
Dickinson-Iron	20	22	—	—	1	—	1	21	22	1	—	—	—
Eaton	17	18	—	—	2	—	—	18	20	2	—	—	—
Genesee	206	203	19	2	7	2	7	228	224	—	4	2	2
Gogebic	20	20	—	—	—	—	1	20	19	—	1	1	—
Grand Traverse, Leelanau, Benzie	41	40	1	3	1	—	—	45	45	—	—	1	2
Gratiot, Isabella, Clare	38	35	3	—	3	—	—	40	41	1	—	1	—
Hillsdale	15	16	3	—	—	—	—	18	19	1	—	1	—
Houghton, Baraga, Keweenaw	21	22	7	—	—	3	1	27	28	1	—	—	—
Huron	12	13	1	—	1	1	—	13	15	2	—	—	—
Ingham	179	182	6	6	6	3	—	189	200	11	—	—	—
Ionia-Montcalm	35	36	3	—	—	3	—	35	39	4	—	—	2
Jackson	102	99	13	—	2	1	1	114	113	—	1	1	—
Kalamazoo	137	139	6	2	5	3	3	146	149	3	—	4	1
Kent	293	304	23	1	[illegible]	1	6	330	340	10	—	6	2
Lapeer	14	15	3	—	—	—	1	17	17	—	—	—	—
Lenawee	32	40	2	—	[illegible]	1	1	35	42	7	—	7	—
Livingston	17	20	—	—	[illegible]	—	1	18	19	1	—	1	—
Luce	6	8	1	—	—	2	1	6	8	2	—	—	—
Macomb	54	53	1	—	1	—	—	55	55	—	—	2	1
Manistee	10	10	1	1	1	—	—	13	13	—	—	—	—
Marquette-Alger	35	36	4	—	1	—	1	39	40	1	—	3	—
Mason	11	11	—	—	1	—	—	11	12	1	—	—	—
Mecosta, Osceola, Lake	15	14	2	—	—	—	1	17	15	—	2	—	—
Menominee	16	18	—	—	1	—	1	17	18	1	—	—	—
Midland	23	28	—	—	—	—	1	24	27	3	—	1	—
Monroe	35	32	3	—	—	1	2	36	33	—	3	1	—
Muskegon	86	89	4	1	3	—	2	96	95	—	1	1	—
Newaygo	9	9	—	—	—	—	1	9	8	—	1	1	1
North Central	18	21	—	1	—	1	—	18	22	4	—	1	1
Northern Michagn	31	32	1	—	2	—	1	33	34	1	—	4	—
Oakland	219	232	11	1	10	2	3	227	251	24	—	5	2
Oceana	8	7	3	—	1	—	—	11	11	—	—	—	—
Ontonagon	3	4	—	—	—	—	—	3	4	1	—	1	—
Ottawa	41	43	2	—	2	—	—	44	47	3	—	—	—
Saginaw	125	125	8	3	2	2	1	137	137	—	—	2	—
St. Clair	56	59	2	4	1	—	—	61	66	5	—	1	—
St. Joseph	27	23	1	—	—	2	—	26	24	—	2	1	—
Sanilac	12	12	—	—	—	—	—	12	12	—	—	1	1
Shiawassee	26	27	1	—	—	1	—	27	28	1	—	1	1
Tuscola	18	16	3	—	—	1	—	19	19	—	—	—	—
Van Buren	19	22	3	—	—	—	1	23	24	1	—	—	—
Washtenaw	186	189	10	2	120	4	2	291	319	28	—	9	—
Wayne	2227	2259	79	11	68	35	32	2305	2385	80	—	34	14
Wexford-Missaukee	15	15	1	—	—	—	—	16	16	—	—	—	1
Honorary Members								7	7				
TOTALS	4910	5008	266	41	287	73	79	5337	5530	212	19	104	32

SECRETARY'S ANNUAL REPORT—1953

To The Council of the MSMS:

I herewith submit the report of the Secretary for the year 1953.

MEMBERSHIP

The Michigan State Medical Society membership for 1953 showed a total of 5,530 members, including 266 Emeritus and Life Members, 41 Retired members and 287 Associate and Military members. The total paid membership was 5,008 with net dues of $98,145.00. The 1953 membership was once again at the highest peak in the history of the society. The number of members with unpaid dues for 1953 was 32.

DEATHS DURING 1953

I regretfully must report a total of seventy-nine deaths among members during the past year:

Allegan County—George H. Rigterink, M.D., Hamilton.

Bay County—D. L. Gordon, M.D., Oscoda; Ernest A. Wittwer, M.D. ,Bay City.

Berrien County—Carl A. Mitchell, M.D., Benton Harbor.

Calhoun County—Clarence R. Brown, M.D., Battle Creek; A. L. Robinson, M.D., Burr Oak.

Dickinson-Iron County—William Fiedling, M.D., Norway.

Genesee County—Alvin T. Bonathan, M.D., Flint; Melvin E. Chandler, M.D., Flint; Robert J. Jermstad, M.D., Flint; Frank E. Reeder, M.D., Flint; Wm. J. Rynearson, M.D., Fenton; DeVerne C. Smith, M.D., Flint; Alvin N. Thompson, M.D., Flint.

Gogebic County—Henry T. Nezworski, M.D., Ironwood.

Houghton-Baraga-Keweenaw County.—Wyllys A. Manthei, M.D., Lake Linden.

Jackson County—Edward O. Leahy, M.D., Jackson.

Kalamazoo County—Charles E. Boys, M.D., Kalamazoo; Rudolph H. Lambert, M.D., Kalamazoo; H. A. Rigterink, M.D., Kalamazoo.

Kent County—William J. DuBois, M.D., Kaleva; Ward S. Ferguson, M.D., Grand Rapids; Lee O. J. Grant, M.D., Grand Rapids; Miles J. Murphy, M.D., Grand Rapids; Donald M. Schuitema, M.D., Grand Rapids; Clyde C. Slemons, M.D., Grand Rapids.

Lapeer County—Robert A. Biggs, M.D., North Branch

Lenawee County—Harry H. Hammel, M.D., Tecumseh.

Livingston County—Guy Marshall McDowell, M. Bay City.

Luce County—Henry E. Perry, M.D., Newberry.

Marquette County—George I. Keskey, M.D., Marquette.

Mecosta-Osceola-Lake County—Gordon H. Yeo, M.D., Big Rapids.

Menominee County—Edward Sawbridge, M.D., Stephenson.

Midland County—Charles V. High, Jr., M.D., Midland.

Monroe County—Vincent L. Barker, M.D., Monroe; John F. Heffernan, M.D., Carleton.

Muskegon County—Charles W. Beers, M.D., Muskegon Heights; Pitt S. Wilson, M.D. Muskegon.

Newaygo County—Dean W. Harris, M.D., Fremont.

Northern Michigan Medical Society—William H. Parks, M.D., Petoskey.

Oakland County—Wm. G. Hutchinson, M.D., Birmingham; O. R. MacKenzie, M.D., Walled Lake; Perry V. Wagley, M.D., Pontiac.

Saginaw County—Martha L. Longstreet, M.D., Saginaw.

Van Buren County—Newton H. Greenman, M.D., Decatur.

Washtenaw County—John D. Adcock, M.D., Ann Arbor; Alvin H. Benz, M.D., Ann Arbor.

Wayne County—Herman F. Albrecht, M.D., Detroit; Abraham M. Altshuler, M.D., Detroit; Edward R. Breitenbecher, M.D., Detroit; Guy L. Breon, M.D., Detroit; J. Ewart Caldwell, M.D., Detroit; George H. Campau, M.D., Detroit; Lawrence H. Carleton, M.D., Detroit; Clarence A. Christensen, M.D., Dearborn; George E. Clark, M.D., Port Franks, Ontario; Donald V. Clark, M.D., Detroit; James D. Collins, M.D., Detroit; Joseph L. DeRosier, M.D., Detroit; Romeo Q. DeTomasi, M.D., Detroit; Thelma Freeman, M.D., Detroit; David B. Gaberman, M.D., Detroit; Benjamin E. Goodrich, M.D., Detroit; Arthur J. Jones, M.D., Detroit; Bastian Kruidenier, M.D., Detroit; Anthony H. Lange, M.D., Detroit; Clarence W. Lemmon, M.D., River Rouge; Frederick W. McAfee, M.D., Detroit; Daniel B. Marcus, M.D., Detroit; B. Wm. McDougall, M.D., Detroit; Harry W. Plaggemeyer, M.D., Detroit; George J. Reberdy, M.D., Detroit; Frank Rizzo, M.D., Grosse Pointe Park; Edward D. Spalding, M.D., Detroit; Harry Stocker, M.D., Detroit; Reu Spencer Taylor, M.D., Detroit; Bryan Trombley, M.D., Detroit; William E. E. Tyson, M.D., Detroit; Milo R. White, M.D., Detroit.

THE JOURNAL

The following financial information relative to THE JOURNAL is found in the annual audit of MaDan and Bailey:

Income was $61,863.08 which is $836.92 under the tentative budget for 1953.

Expenses were $60,416.81 which was $2,013.19 under the tentative budget for 1953.

These figures indicate a net gain for the year 1953 of $1,446.27.

This is largely due to the decreased size of THE JOURNAL in terms of pages and an increase in advertising rates effective October 1, 1953, as well as increased charges for reprints.

THE JOURNAL, during 1953, continued the policy of special distinctive covers to emphasize some of the major activities of the Society, e.g., Cancer, Heart Disease, Michigan Medical Service, et cetera.

The Publication Committee and Editor have continued the practice of bringing to the members of the MSMS matters of special interest, both scientific and economic.

FINANCES

An audit of the books of the Society was completed by MaDan and Bailey as of December 26, 1953. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive Offices, 606 Townsend Street, Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 20,053.08
Accounts Receivable	4,804.35
Investments	129,069.73
Property	56,595.16
Other Assets	10,071.02
Total	$220,593.34
Liabilities:	
Accounts Payable	$ 9,959.38
Unearned Income	3,450.00
Total Liabilities	13,409.38
Society Equities	
Reserved for Special Purposes:	
Public Education Reserve	30,000.00
Public Education Program	59,887.04
Rheumatic Fever Control Program	9,571.69
Lecture Grant	100.00
Contingent Fund	21,729.67
Building Fund	13,002.15
Unallocated Equity and Net Gain	72,893.41
Total Liabilities and Equities	$220,593.34

From the income and expense statement we find the total income was $102,581.07 with total expenses of $95,943.81, indicating a net gain of $6,637.26.

We note from the Income and Expense Summary that even with an indicated loss by the Beaumont Memorial and the Rheumatic Fever Control Program and a very small loss on the Michigan Clinical Institute, the overall program for the year indicates a net gain of $3,374.98. The loss in the Beaumont Fund of $35,994.01 is occasioned by the fact that the expenditures for the year 1953 exceeded the income by that amount. It does not consider the balance on hand at the beginning of the year. The same situation obtains in the reported loss of $6,291.88 in the Rheumatic Fever Fund.

1953 ANNUAL SESSION

The 1953 Annual Session held in Grand Rapids in September showed a total registration of 3,266, which was a record attendance for Grand Rapids. The General Assembly type of program with daily discussion conferences was continued as is recent years and brought to Michigan twenty-six Essayists. There were 18 Scientific Exhibits in addition to the 114 Technical Exhibits in 125 spaces.

The policy of bringing to the Scientific Assembly out-of-state essayists of national and international reputation was continued, and no expense was spared in making the meetings as interesting and instructive as possible. In spite of the rapidly rising costs of operation a modest gross profit, before proration of salaries, accrued to the Society from the Annual Session. The 114 technical exhibitors received the usual appreciation and generous attention of the registrants.

1953 HOUSE OF DELEGATES

The House of Delegates, transacted the legislative business of the Society with unusual dispatch, but wholly consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

1. Adopted reports of all Standing Committees and of all Special Committees of the Society and of The Council.
2. Adopted resolutions and motions concerning:
   (a) Resolution re Cline (AMA) Report.
   (b) Resolution re Michigan State Medical Assistants Society.
   (c) Resolution re Courses in Medical Ethics.
   (d) Resolution re Veterans Care.
   (e) Resolution re Associate Membership for Veterans Administration Physicians (including amendment to By-Laws, Chapter 5, Section 3-e).
   (f) Resolution re Venereal Disease Reporting.
   (g) Resolution re Study of Mental Hygiene Problems.
   (h) Resolution re Welfare Reports.
   (i) Resolution re Advisory Committee to Michigan Hospital Service.
   (j) Resolution re Joint Commission for Hospital Accreditation.
   (k) Amended Resolution re Cancer Reporting.
   (l) Amended Resolution re Fluoridation of Water.
   (m) Substitute Resolution re Water Resources.
   (n) Substitute Resolution re Migratory Labor.
   (o) Motion re Study of Fees for Surgical Assistants.
3. Referred to
   (a) The Council, a Resolution re Lowering of MSMS Dues.
   (b) The Council, a Resolution re Public Relations Funds.
   (c) The Council, a Resolution re American College of Surgeons.
   (d) To Basic Science Study Committee, a Resolution re Amendment to Basic Science Act.
4. Disapproved two Resolutions:
   (a) Re Lowering of Dues for Younger Members.
   (b) Re Further Study of Health and Accident Insurance Program.
5. Adopted Amendments to By-Laws:
   (a) Clarifying Phraseology in Chapter 5, Section 3 re Associate Membership.
   (b) Giving Retired Members the Right to Vote and Hold Office, in Chapter 5, Section 4.
   (c) Deleting Emeritus Membership, in Chapter 5, Section 5.
   (d) Renumbering Sections 6, 7, 8, 9, 10 in Chapter 5 to become Sections 5, 6, 7, 8, 9.
   (e) Re Defining Life Membership, in Chapter 5, *New* Section 6.
   (f) Changing the word "Meeting" to "Session" in Chapter 5, *New* Section 9.
6. Elected Wm. J. Stapleton, Jr., M.D., Detroit, as Michigan's Foremost Family Physician for 1954.
7. Elected to Special Memberships:
   (a) Thirty-five members to Life Membership.
   (b) Fourteen members to Retired Membership.
   (c) One hundred and twenty-four members to Associate Membership.
8. Elected the following Officers:
   (a) W. M. LeFevre, M.D., Muskegon, as Councilor of the 11th District (1958).
   (b) B. T. Montgomery, M.D., Sault Ste. Marie, as Councilor of the 12th District (1958).
   (c) W. S. Jones, M.D., Menominee, as Councilor of the 13th District (1958).
   (d) W. B. Harm, M.D., Detroit, as Councilor of the 17th District (1958).
   (e) W. A. Hyland, M.D., Grand Rapids (1955); R. A. Johnson, M.D., Detroit (1955); and J. S. DeTar, M.D., Milan (1955), as Delegates to the American Medical Association.
   (f) E. F. Sladek, M.D., Traverse City (1955); W. W. Babcock, M.D., Detroit (1955); and O. J. Johnson, M.D., Bay City (1955), as Alternate Delegates to the American Medical Association.
   (g) R. H. Baker, M.D., Pontiac, as President-Elect.
   (h) J. E. Livesay, M.D., Flint, as Speaker, House of Delegates.
   (i) K. H. Johnson, M.D., Lansing, as Vice Speaker, House of Delegates.

Organizational Activities

MICHIGAN CLINICAL INSTITUTE AND HEART DAY

The seventh annual scientific institute held under the sponsorship of the Michigan State Medical Society in co-operation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University College of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 11-12-13, 1953. The institute designed to provide high type scientific program, encourage Michigan physicians to prepare presentations and to publicize Michigan as a medical center, this year featured twenty Michigan doctors of medicine and thirteen out-of-Michigan essayists on the program.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 2,283.

PUBLIC RELATIONS CONFERENCE

In 1953, the Public Relations Conference was held separate from the County Secretary's Conference. The date was February 1, 1953, and the attendance was 111 representatives of the MSMS and the Woman's Auxiliary.

COUNTY SECRETARIES CONFERENCE

On February 25, 1953, the Secretaries of Michigan's component County Medical Societies held their annual meeting in Lansing. Total registration was sixty-four and included County Secretaries, County Presidents, members of the MSMS Council, representatives of the Woman's Auxiliary, the Medical Assistants Society, Executive Secretaries and guests. Included in the program was a tour of the MSMS Headquarters office and a talk by Honorable Wade Van Valkenburg of Kalamazoo on "A Legislator's Problems."

BEAUMONT MEMORIAL

The Beaumont Memorial Dedication is scheduled for Saturday, July 17, 1954, on Mackinac Island. As indicated in frequent announcements in THE JOURNAL of the Michigan State Medical Society, all MSMS members are cordially invited to attend.

Contributions to the Beaumont Memorial, to December 26, 1953, total $31,484.67.

The cost of erecting the Beaumont Memorial has amounted to $41,226.83. It is estimated that an additional $5,000 will be necessary to furnish the building and to landscape the grounds.

The Beaumont Memorial is a monument to the generosity of Michigan's doctors of medicine—one that will result in good public relations for our M.D.'s for many decades to come.

MICHIGAN CANCER CO-ORDINATING COMMITTEE

This new group was organized on November 12, 1953, to co-ordinate the activities of the six Michigan groups interested in cancer control: Michigan Division, Inc., American Cancer Society; Southeastern Michigan Division, American Cancer Society; Michigan Department of Health; Michigan Health Officers Association, Michigan State Dental Society and the Michigan State Medical Society.

The Chairman of the Michigan Cancer Co-ordinating Committee is C. Allen Payne, M.D., of Grand Rapids. The co-operative organization of this group augurs well for a joint program and continuing progressive activity in the field of cancer control.

GROUP HEALTH AND ACCIDENT INSURANCE PROGRAM

This program approved by the 1953 MSMS House of Delegates and underwritten by the Provident Life and Accident Insurance Company of Chattanooga, Tenn., became effective November 15, 1953, as promised. All valid applications, received to January 15, 1954, are now in force.

Field agents of the Provident Life and Accident Insurance Company were active in the enrollment of members of the Michigan State Medical Society up to the 1953 Christmas holidays; also three solicitations by mail were sent by the Provident to MSMS members. Thus all doctors of medicine in Michigan, members of the Michigan State Medical Society, had the opportunity to increase their protection against accident and sickness disability.

At the conclusion of the first enrollment (to January 15, 1954), the solicitation itself actually ceased during the holidays, a total of 1,414 applications were received by Provident. Several claims already have been paid by Provident.

It is anticipated that the total enrollment will be considerably *increased* when Provident begins its personal re-solicitation in the early spring. Provident is confident that its eventual enrollment will be close to 90 per cent of the MSMS membership.

The officers of the Michigan State Medical Society feel that this group health and accident insurance program, the first and only group health and accident insurance plan endorsed by the Michigan State Medical Society, is one of the choice privileges of State Society membership.

MEDICAL ADVISORY COMMITTEE TO MICHIGAN HOSPITAL SERVICE

The Michigan State Medical Society Advisory Committee to Michigan Hospital Service was appointed by the Council of the State Society at its Mackinac meeting in July, 1952. This committee was organized in response to a request from Michigan Hospital Service that such a group be formed to supervise an investigation relative to the utilization of pre-payment hospital contracts with particular reference to possible improper use of such contracts. It was also requested, and contemplated by the Council, that the committee would advise and, in so far as proper would assist, Michigan Hospital Service in their efforts to inform interested groups concerning the entire utilization problem.

The committee was organized at its first meeting in September, 1952. At this meeting it was determined that the facts necessary to any evaluation of the amount and types of any faulty utilization could only be determined by a survey of clinical records in selected Michigan hospitals. The committee accordingly agreed to supervise such a survey which was to be conducted by Dr. Harry F. Becker, who became Field Secretary to the committee.

This committee has held twelve meetings all of which have been attended by a very high percentage of members. These meetings were all held in Detroit and all were held during evening hours. Since a number of the members lived at some distance from Detroit the total time and travel distances involved were large. At each meeting if the entire membership was present, the total travel of members of the committee was nearly 2,600 miles. The expenditure of time was also considerable. These facts are mentioned to emphasize that the unusually competent and arduous work done by this, and similar committees, exacts a considerable toll upon the leisure, as well as upon the income, of the Membership. Organized medicine, Blue Cross, and indeed the general public, are fortunate in being able to call such men to their service.

This committee established, and frequently revised the criteria by which faulty and improper use were evaluated. In the performance of this task they examined hundreds of the abstracts of the more than 12,000 clinical records prepared by the Surveyor. They also spent much time on the report of the survey which is currently being continued and presented to hospital staffs and county societies by the individual members of the committee. Under the chairmanship of Dr. Reveno the group has functioned to supervise the release of pertinent public information, and to advise and assist Michigan Hospital Service in many ways.

This group furnished the impetus behind the "Golden Goose Breakfast" staged by the Council at the Grand Rapids meeting, and have requested that a similar breakfast be held at the Clinical Institute in Detroit March 10-12, 1954.

At present the committee is engaged in a study of utilization in special types of general hospitals, in addition to the constant appearances of members at various medical meetings held to discuss the problem their work has pointed up. Further reports of progress will be made from time to time. Presentation of factual material to medical groups continues.

PUBLIC RELATIONS

The MSMS has succeeded so well in integrating its Public Relations program into its other organizational work that it is virtually impossible to separate public relations activities from organizational efforts even for purposes of reporting. Virtually every new program or

problem in medicine is viewed, even at the outset, from the angle of public relations. Consequently, in a society as alive to the times as the MSMS, there is a constant re-orientation of both subject matter, and methods, used in our public relations.

The year 1953 has seen a slight diminution in the scope and particularly in expenditures for radio, television, motion pictures and newspapers. This same year has seen a great increase in liaison activities and a general "re-tooling" of its program to fit the changing pattern of events.

For example: The MSMS has developed no new pamphlets in 1953 but it has obtained from the AMA sixteen pamphlets and distributed 248,898 of them in addition to completely revising its popular brochure on Medical Associates and reprintng 10,000 copies in addition to developing in connection with the Michigan Heart Association a printed biennial report on the activities of the Rheumatic Fever Control Committee and the Michigan Heart Association.

No new series of radio programs have been developed but the "Tell Me, Doctor" transcriptions previously prepared have been re-issued to three radio stations and thanks to a marked improvement in AMA produced radio transcriptions several series of thirteen weeks each are being made available through the MSMS to several Michigan radio stations. In television a new program series has been begun in conjunction with the Washtenaw County Medical Society over WPAG-TV, Ann Arbor. In addition, MSMS members have participated in more than a 177 presentations; over half of that number appearing on the "Court of Health" program sponsored by the Michigan Health Council.

The motion pictures "Lucky Junior," "To Your Health" and particularly the "To Save Your Life" film have continued to receive wide distribution. In co-operation with the MSMS the Metropolitan Life Insurance Company distributed the film "Cheers For Chubby" through 198 theaters in Michigan.

Credit should be given to the Wayne County Medical Society for initiating in Michigan the new Medical Forum idea. Since its inauguration in Detroit, it has been taken up by the Kent County Medical Society and is being planned also in Jackson.

Each year more attention has been given by the press to the MSMS Annual Session and the Michigan Clinical Institute and 1953 is no exception as newspapers throughout the State covered these sessions more generously than ever before and without a single derogatory article.

The MSMS exhibit has appeared at the two major meetings of the MSMS, the Michigan Rural Health Conference, and the Michigan State Fair. On the latter occasion over 100,000 pamphlets were distributed and thirty-three motion picture films used in 256 presentations.

Much more might be recounted—the establishment of the award for outstanding science writing (Jack Pickering of the *Detroit Times* receiving the first recognition) the promotion of the Adult Education programs for Medical Care in the Home and Family and for refresher work for medical associates, the efforts toward a statewide medical associate recruitment program, the outstanding work being done in M.D. Procurement and Placement in co-operation with the Michigan Health Council, the fine Michigan Rural Health Conference held two weeks ago in Saginaw, Chairmanned by Dr. John R. Rodger of Bellaire, the co-operation with governmental agencies, with educational institutions such as the University of Michigan and Michigan State College, with other professions and with voluntary health agencies that is reviewed elsewhere in this report, the progressive program of the Woman's Auxiliary to the MSMS and the Michigan State Medical Assistants, the hundreds of meetings attended and hard work done at the Executive offices in general operation of the Society and by the MSMS Field Secretaries.

However, rather than to continue and to bore you with an item by item accounting of the past, I would like to invite to your attention and consideration the new program prepared for 1954 under the title "Winning Friends for Medicine." This is in essence a PR program for county medical societies and in its aggregate it is the PR program of the MSMS. It consists of 26 basic projects each laid out under the headings, Purpose, MSMS Plan, MSMS Services to County Medical Societies and Recommended Program for County Medical Societies. It is possible that additional projects will be added to this list. We do not intend that each county medical society adopt all of these projects, desirable though that may be, but rather that each county medical society select those projects which that society desires to emphasize during 1954. Our PR Field Secretaries will work with them on these projects in order to bring to the county medical society all the help possible from the MSMS.

Most of these projects are already approved and in being. However, you will note that many of them are amplified and there are some new ones.

I wish to note particularly the following:

Project I.—"The Business Side of Medical Practice." This is offered in extension of our present activities and in furtherance of the spirit of the action taken by the AMA House of Delegates in December, 1953.

Project VII.—"A Family Doctor for Every Family." This project is a formalizing in a campaign of a familiar and worthy concept.

Project IX.—"The Building and Expansion of Hospitals." This project is designed to rectify the present unfortunate situation we are in today of being the major force in the building and expansion of hospitals while receiving no recognition for this service.

Project XI.—"Providing Means to Maintain Highest Standards in the Administration of Medical Practice." This project indicates that thought is being given to the proposal that perhaps such a layman as the Chief Justice of the Michigan Supreme Court be added to our State Mediation Committee to indicate public representation upon it. It also provides for an easier means of registering complaints for it is true that the larger the percentage of total complaints registered with us the fewer become public.

Project XX.—"Strengthening Medical Society Organization." This suggests among other things a special invitation and program at the MSMS Annual Session for all M.D.'s newly registered during the past year in Michigan.

(A recommendation on this subject follows).

Project XXIV.—"Co-operation with Professions and Vocations whose Science and Work Borders Upon Medical Science and Practice." This is proposed as a continuation in our efforts to gain new allies through understanding and liaison with other reputable state and county organizations.

(A recommendation on this subject follows).

Of course, as each step in these projects is taken it is subject to the review of The Council and its Executive Committee. As I said before most of the basic principles and much of the actions called for have been previously approved. However the entire program is presented here for your approval as an outline comprising a well-rounded program designed to serve as well in Public Education, Public Service and Professional Relations during 1954.

COMMITTEES

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1953, the sixty-three com-

mittees of the Michigan State Medical Society held a total of eighty-eight meetings and practically every meeting was attended by your Executive Director or Secretary. A total of 546 fellow members in your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

LEGISLATION

MSMS already has intensive activity under way in the 1954 session of the legislature, but it is well to review the results of the 1953 session.

Once again MSMS took action on all proposed legislation affecting health and medical practice in Michigan. Success may be measured by the following summary:

The 1953 Legislature considered 783 pieces of legislation and enacted 239 measures into law. Seventy-three of the proposals considered were of interest to the medical profession. In the eighty-two working days of the session, no bill was enacted into law which might tend to lower the standards of the medical profession. On the other hand, several bills of direct benefit to the health and medical welfare of the citizens of Michigan were adopted by the Legislature.

Two major laws of importance to the people of Michigan, strongly supported by MSMS and passed by the Legislature were: *Public Act No. 181* of 1953, which authorized the voters of any county to abolish the outmoded office of County Coroner and establish a Medical Examiner System, and *Public Act No. 67* of 1953, which amended the Medical Practice Act to allow Canadian doctors of medicine awaiting naturalization and other M.D.'s in Michigan under the Federal Displaced Persons Act to be granted annual temporary licenses, renewable for not more than five years.

As in the past, every bill which would benefit the health of Michigan residents was supported by MSMS.

It must be remembered that much of the success in the MSMS legislative program for 1953 was the direct result of splendid back-home support. Similar support will be required for the 1954 session, which finds the Legislature considering amendment of the Basic Science Act, hospital licensing, establishment of an all-inclusive State Health Affairs Office, changes in VD reporting, many proposals in the field of mental health, measures concerning tuberculosis case-finding and control, the usual "nuisance" legislation instigated by sub-standard healing groups, and many other bills related to health and medical affairs.

This session of the legislature is expected to continue through April 9, 1954. To make sure that the people of Michigan will continue to enjoy the finest system of medical care available, a sincere interest in legislation on the part of their doctors of medicine must continue to exist.

RHEUMATIC FEVER CONTROL PROGRAM

During the year 1953 the Society-sponsored plan of rheumatic fever control has continued to develop through a program of education, case-finding, and service. Originally proposed by the Preventive Medicine Committee in 1945, it was designed as the voluntary approach to a problem in public health and preventive medicine. It is a program by doctors, for doctors and for the welfare of their patients. It requires for its success the help and co-operation of every member of this society.

The feature project of the Rheumatic Fever Control Program is the organization of some twenty-seven Rheumatic Fever Diagnostic and Consultation Centers—(thirteen in Wayne County, fourteen out-State), sponsored and operated voluntarily by the local Medical Societies. A practicing physician may refer to these Centers his more difficult problems of diagnosis and of management for consultation and advice by a panel of qualified consultants. The record to date shows 2,968 admissions to this service, each referred by the private physician. Each of the Centers also serves as a source of authentic information related to rheumatic fever and rheumatic heart disease for professional and lay education in each geographical area.

Seven practicing physicians, consultants in the several Rheumatic Fever Diagnostic and Consultation Centers were awarded Annual Postgraduate Fellowships for the Study of Rheumatic Fever in 1953. Each Fellowship carries a stipend of not to exceed $500.00 for travel, registration and living expenses while attending a two-week special course.

Financial support of the Rheumatic Fever Control Program is derived wholly from grants by the Michigan Heart Association, a member Agency of the United Welfare Fund of Michigan. For 1953, the contribution by the Michigan Heart Association amounted to $19,000.00.

The Rheumatic Fever Control Program merits the continued support not only of the Officers and Councilors of the Michigan State Medical Society, but of every individual member.

AGENCY CONTACTS

The following imposing list comprises the various groups with which the MSMS has had liaison during 1953:

Governmental Agencies:

Michigan Department of Health
The Michigan Crippled Children Commission
Michigan Department of Social Welfare
Michigan Mental Health Department
Michigan Insurance Department
Michigan Office of Hospital Survey and Construction
Michigan Department of Public Instruction
State Administrative Board Members
University of Michigan Medical School
Wayne University College of Medicine
Michigan State College
University of Michigan
Wayne University
Michigan Selective Service headquarters
Michigan State Board of Registration in Medicine
Michigan Civil Defense Division
Governors Commissions on: Alcoholism, Problems of the aging
Michigan Veterans Trust Fund

Voluntary Statewide Health Organizations:

Michigan Health Council
Michigan Heart Association
Michigan Epilepsy Center
Michigan Nurses Association
Michigan Branch American Cancer Society
Southeastern Michigan Division, American Cancer Society
Michigan Society for Crippled Children and Adults
United Cerebral Palsy Association
Michigan Hospital Association
Michigan Hospital Service
Michigan Medical Service
Michigan Foundation for Medical and Health Education
Michigan Welfare League
United Health and Welfare Fund
Michigan Public Health Association
Michigan Public Health Officers Association
Michigan Tuberculosis Association
Michigan Diabetes Association
Michigan Arthritis and Rheumatism Foundation

The Kellogg Foundation—Hospital Division
Michigan Association for Approved Nursing Homes

Voluntary Statewide Medical Organizations:

Michigan Branch of the American Academy of Pediatrics
Michigan Pathological Society
Michigan Industrial Institute
Michigan Industrial Medical Society
Michigan State Dental Society

Voluntary Statewide Lay Organizations:

State Bar of Michigan
Michigan Prosecuting Attorney's Association
Michigan Association of Police Chiefs
Michigan Municipal League
Medical Jurisprudence Committee of the State Bar of Michigan
Michigan Adult Education Association
Michigan Education Association
Business Research Division of General Motors
Department of Civic Affairs of the Ford Motor Company
Michigan Commercial Secretaries Association
Capitol Club (37 trade associations)
The Apostles (12 state trade associations)
Michigan Farm Bureau
Michigan Grange

Voluntary Organizations of Importance in the Health Field:

American Medical Association
American Legion
Veterans of Foreign Wars of the United States
Amvets
Disabled American Veterans
Metropolitan Life Insurance Company
American Trade Association Executives
Public Relations Society of America
American Medical Education Foundation
Student American Medical Association
Medical Economics
Blue Cross-Blue Shield
National Society for Medical Research
Insurance Economics Society of America

SECRETARY'S LETTERS

As part of the Society's general educational program for individual members and component County Societies there were issued during the year 1953, six Secretary's letters, three to County Secretaries and keymen and three to all members of the Michigan State Medical Society. These informational circulars were in addition to the monthly issues of THE JOURNAL with its scientific articles and informative news items.

EXECUTIVE OFFICE AND PERSONNEL

During the past year the Executive Office Building at 606 Townsend Street, Lansing, has undergone some remodeling. The front porch was removed and a new entrance provided, with a rearrangement of the stairway in the lobby.

The driveway was widened and paved and a new paved parking lot was built.

There remains to be done in the tentative improvements redecorating of the outside of the building and some landscaping of the yard.

During 1953, several replacements were made in the Executive office personnel. Mr. Dwight Jarrell was employed to succeed Mr. Dan Ford as a Field Secretary with headquarters in the Detroit office.

Mr. DeWitt Brewer succeeded Mr. Jack Kantner as Assistant Public Relations Council. One replacement was made in the stenographic pool. Executive Director Burns assumed the duties of Secretary of the Cancer Committee upon the retirement of Frank L. Rector, M.D.

The Executive office personnel have in all instances discharged their duties with commendable loyalty and efficiency.

FOREMOST FAMILY PHYSICIAN AWARD

The sixth annual "Foremost Family Physician Award" was accorded William J. Stapleton, Jr., M.D., of Detroit, Michigan. The award will be officially made in March, 1954, on the occasion of the Michigan Postgraduate Clinical Institute.

RECOMMENDATIONS

After careful consideration of the continued successful operation of the MSMS in its many projects and activities, I respectfully submit for your consideration the following recommendations:

1. That all doctors of medicine who have registered in Michigan between September 1, 1953, and September 1, 1954, be given special invitations to attend the MSMS Annual Session, whether they are members of the MSMS or not, and that a special program for purposes of indoctrination in MSMS policies and activities be presented to them.

2. Because many persons and organizations, whose science or activity bears upon the peripheries of the science and practice of medicine, are looking for leadership to medicine; and because such leadership offers an opportunity and responsibility to medicine, your secretary recommends that county medical societies urge their members to bring these people into a close working relationship with the medical society at every opportunity.

3. That The Council give favorable consideration to the adoption of the "Essentials for a county medical society Constitution and By-Laws," as developed recently by the MSMS Legal Counsel.

4. That, in view of the many questions regarding details of MMS and MHS contracts revealed at Golden Goose meetings throughout the state, The Council request MMS and MHS to compile such questions with suitable answers, and that these be printed in the MSMS JOURNAL and that reprints be made available by the service corporations to hospital staffs, county medical societies, all members MSMS at a subsequent series of meetings similar to the current Golden Goose meetings; and that such questions and answers be reviewed by The Council or its Executive Committee before publication.

Your Secretary wishes to express to the members of The Council his sincere appreciation for the willing and most helpful co-operation they have accorded him during the past year.

Too much commendation cannot be accorded all the members of the administrative personnel for their splendid co-operation and exceptional efficiency.

To everyone who have aided so generously and willingly in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,
L. FERNALD FOSTER, M.D.
Secretary

TREASURER'S ANNUAL REPORT—1953

I herewith submit a report of the securities and cash belonging to the Michigan State Medical Society in my possession as duly elected Treasurer for the year January, 1953, to January, 1954.

The following list of bonds totaling $66,000 face value are in lock box C 131, Michigan National Bank Trust Department in Grand Rapids.

Cash balance as of December 31, 1953, was	$4,382.37
Cash balance as of December 31, 1952, was	$2,382.37
Net gain due to interest received in 1953	$2,258.86
Balance on hand as of January 15, 1954	$4,382.37

The short term government paper was held in Chicago and Lansing banks with receipts for same in my possession, the latter were surrendered to the executive office

for all of the paper during 1953. The auditors have noted the use of these funds in their report of the audit.

MICHIGAN STATE MEDICAL SOCIETY BONDS

$15,000	United states of America 1½% Treasury Notes due March 15, 1955, with March 15, 1954, and subsequent coupons attached.
$ 3,000	United States of America 1⅜% Treasury Notes due March 15, 1954, with March 15, 1954, coupons attached.
$ 5,000	United States of America Series G Savings Bonds dated May 1, 1946.
$ 5,000	United States of America Series G Savings Bonds dated March 1, 1948.
$30,000	United States of America Series G Savings Bonds dated August 1, 1946.
$ 8,000	United States of America 2¾% Treasury Bonds Investment Series B1975-1980 due April 1, 1980.

Respectfully submitted,
WILLIAM A. HYLAND, M.D.
Treasurer

EDITOR'S ANNUAL REPORT—1953

THE JOURNAL of the Michigan State Medical Society was founded by The Council under the secretaryship and editorship of the late Andrew P. Biddle, M.D., in September, 1902, and has not missed an issue since that date. The December, 1953, issue was number 616 in chronological order. THE JOURNAL has from its inception not been just another medical journal, publishing scientific articles, but has been devoted to the concept of furthering the interests and accomplishments of the medical profession in Michigan. It has very definitely been a "house organ."

We have published items of general interest, items of news value, and have always endeavored to give the membership the economic as well as scientific facts of importance and have in no small degree been a stimulating factor in the very considerable progress of the medical profession in our state. The editorial policy has continued to be economic and sociologic rather than scientific. We have presented in our original articles the scientific progress. We have gathered from every source, and have, ourselves, prepared numerous articles, mostly short, giving the politico-socio-economic trends as we have seen them. Michigan has been a leader in new ideas, new concepts, and THE JOURNAL has followed through with the publicity to a happy outcome.

During recent years, THE JOURNAL has published: 1,092 pages in 1942; 1,022 in 1943; 1,134 in 1944; 1,414 in 1945; 1,692 in 1946; 1,478 in 1947; 1,446 in 1948; 1,566 in 1949; 1,526 in 1950; 1,470 in 1951; 1,654 in 1952; and 1,414 in 1953. We started this past year with the intention of cutting down somewhat on the number of pages. We had noted the great increase during the years when the threat of socialized medicine was ever present, and anticipated a lessened urge toward national socialism, including medicine. This past year, we did succeed in cutting down more than two hundred pages, if we consider the Roster supplement of 68 pages as separate from THE JOURNAL.

During the year, we have published original papers from 161 different authors. This year, only five authors were represented on two papers. One author appeared three times—Wm. S. Reveno, M.D., Detroit, with two scientific papers and one important report to the membership requested from him as a Committee Chairman. We have been trying for several years to secure some definite medical-pathological conferences, and this year have published four from the work of J. S. Smith, M.D., of Saginaw.

We have prepared and published forty-four editorials, for the most part covering matters of general interest to the profession. They have not been of a scientific nature, and several have been copied by other journals. We have selected thirty-three editorial comments from others—medical journals, newspapers, magazines, and wherever we found an item we considered of challenging import to the profession. Seventy "In Memoriam" notices have been published; fifty-seven book reviews, and thirty-one Letters to the Editor or to other officers of the Society.

We have again followed the plan of the past several years in the matter of special interest numbers with distinctive covers, designing new covers for each issue. The cover for the January 1953 issue, "Annual Heart Number," featured a fine picture of the late Frank L. Wilson, M.D., with a border of sections of electrocardiograms. February was devoted to Dr. William Beaumont and carried in four colors the Dean Cornwell painting which is now the property of Michigan State Medical Society and will be hung in the Beaumont shrine on Mackinac Island. March, "Early Diagnosis Cures Cancer," with drawings in two colors; April, the Medical-Legal Number with a distinguished jurist taking his bench (also printed in four colors); this issue carried six papers used jointly with the Michigan State Bar Journal; May was the Michigan's Foremost Family Physician Number, with headings and picture of S. L. Loupee, M.D.; June, the annual Blue Shield testimony with the Blue Shield map of Michigan in faces; July, the Annual Session, with President R. J. Hubbell, M.D., and views; August, the Venereal Disease number with appropriate pictures; September, Arthritis—"Spotting the Crippler," also the Roster as a supplement; October, Diabetes showing mass picture of unknowning victims; November, Michigan Health Council, with young doctors casting a shadow on the state; December, "Heart Progress through Research," the annual Heart Number supplied by the Michigan Heart Association. We believe the special interest features this year have met the high standards set in previous years.

The Editor wishes to express his thanks and gratitude to the Publication Committee, to the Executive Committee, and to the Officers and The Council of the Society for their generous co-operation, freely given suggestions and unfailing loyalty throughout the year. The work has been a great pleasure.

Respectfully submitted,
WILFRID HAUGHEY, M.D.
Editor

MICHIGAN STATE MEDICAL SOCIETY 1954 BUDGET ESTIMATES

GENERAL FUND

INCOME:

4,800 members @ $45.00		$216,000.00
Less:		
Allocation to THE JOURNAL @ $1.50	7,200.00	
Allocation to Public Education, Public Service, Professional Relations @ $20.00	96,000.00	
Allocation to Contingent Fund @ $1.50	7,200.00	
Allocation to Building Fund @ $2.00	9,600.00	
Balance to General Fund @ $20		$ 96,000.00
Interest Income		2,500.00
Miscellaneous Income		200.00
TOTAL FUNDS AVAILABLE		$ 98,700.00

EXPENSES

ADMINISTRATIVE AND GENERAL:

Printing and Mailing	$ 600.00
Office Supplies	1,500.00
Postage and Express Charges	2,500.00
Insurance and Fidelity Bonds	3,750.00
Auditing	550.00
Salaries—Administrative	8,700.00
Salaries—General Office	21,594.30
General Counsel Retainer	3,960.00
General Counsel Expense	300.00
Equipment and Repairs	950.00
Telephone and Telegraph	3,000.00
Payroll Taxes	1,600.00
Misc. Expense	1,200.00
Secretary's Office Expense	300.00
Total Administrative and General Expenses	$ 50,504.30

SOCIETY ACTIVITIES:

Council Expense	$ 11,000.00
Delegates and Alternates to AMA	7,000.00
General Society Travel and Entertainment	4,000.00
Officers Travel	2,500.00
Secretary's Letters	900.00
Woman's Auxiliary	600.00
Dues Collection Expense	2,160.00
Contributions (World Medical Assn. and SAMA)	550.00
Total Society Activity Expenses	$ 28,710.00

COMMITTEE EXPENSES:

Legislative	$ 1,800.00
Postgraduate Medical Education	3,000.00
Preventive Medicine	100.00
Cancer Control	2,000.00
Child Welfare	200.00
Geriatrics	400.00
Industrial Health	200.00
Maternal Health	200.00
Mental Hygiene	250.00
Scientific Radio	50.00
Venereal Disease	50.00
Tuberculosis Control	150.00
Michigan Health Council	10,000.00
Rural Medical Service	200.00
Emergency Medical Service	350.00
Procurement and Assignment	50.00
Beaumont Memorial Restoration	200.00
Permanent Conference Committee	50.00
Sundry Committee Expense	1,500.00
Bi-Annual Report (Rheumatic Fever)	1,000.00
Total Committee Expense	$ 21,750.00
TOTAL GENERAL SOCIETY EXPENSES	$100,964.30
GAIN OR LOSS FOR THE YEAR (LOSS)	$ 2,264.30
BALANCE FROM PRIOR YEARS	$ 72,893.41
	$ 70,629.11
NET GAIN OR LOSS ON ANNUAL SESSION, MCI, *THE JOURNAL* (GAIN)	1,617.21
BALANCE TO 1955	$ 72,246.32

BUILDING MAINTENANCE FUND

INCOME:

Allocation from 1954 dues	$ 9,600.00
Total Funds Available	$ 9,600.00

EXPENSES:

Decorating—(Exterior) Sandblast and Point	$ 850.00
Painting Exterior (Trim)	300.00
Lot (Landscaping)	350.00
Heating	600.00
Lighting	400.00
Water	70.00
Janitor—Salary	3,162.21
Janitor—Supplies	100.00
Taxes	689.95
Insurance	650.00
General Repairs	250.00
Depreciation	1,416.71
Window Cleaning	250.00
Miscellaneous Expenses	200.00
Reception Room Furnishings	500.00
TOTAL EXPENSES	$ 9,788.87
GAIN OR LOSS FOR YEAR (LOSS)	188.87
BALANCE FROM PRIOR YEARS	13,002.15
BALANCE TO 1955	$ 12,813.28

CONTINGENT FUND (SURPLUS)

INCOME:

Allocation from 1954 Dues	$ 7,200.00
Balance from prior years	21,729.67
TOTAL	$ 28,929.67

ANNUAL SESSION

INCOME:

Booth Sales (99 spaces)	$ 22,600.00

EXPENSES:

Scientific Meeting Expense	$ 4,250.00
Registration	200.00
Exhibit Expense	3,500.00
Hotel Expense (MSMS Staff)	600.00
Officer's Night	300.00
State Society Night	3,000.00
Printing, Mailing & Postage	2,500.00
Press Expense	1,100.00
Scientific Work Comm.	300.00
Salaries	4,563.96
House of Delegates Expense	1,200.00
Telephone & Telegraph	200.00
Misc. Expense	700.00
1951 Expenses	
TOTAL EXPENSES	$ 22,413.96
GAIN OR LOSS ON ANNUAL SESSION (Gain)	186.04

MICHIGAN CLINICAL INSTITUTE

INCOME:

Booth Sales (74 spaces)	$ 12,940.00

EXPENSES:

Scientific Meeting Expense	$ 2,200.00
Registration	200.00
Exhibit Expense	3,300.00
Hotel Expense (Including Entertainment)	600.00
Printing, Mailing & Postage	2,200.00
Press Expense	800.00
Salaries	2,363.96
Telephone & Telegraph	50.00
MCI Committee Meetings	100.00
Miscellaneous Expense	300.00
TOTAL EXPENSES	$ 12,013.96
GAIN OR LOSS ON M.C.I. (Gain)	826.04

PUBLIC SERVICE ACCOUNT

INCOME:

Allocation from Dues—1954	$ 21,600.00

EXPENSES:

Committee Meetings	$ 100.00
Postage & Mailing	500.00
Salaries	14,166.66
Telephone & Telegraph	1,000.00
Travel & Entertainment	3,000.00
Miscellaneous Expense	100.00
Rural Health Conference	250.00
Legislative Committee & Bulletin	600.00
TOTAL EXPENSES	$ 19,716.66
GAIN FOR THE YEAR	1,883.34

PROFESSIONAL RELATIONS ACCOUNT

INCOME:

Allocation from Dues—1954	$ 31,200.00

EXPENSES:

Committee Meetings	$ 300.00
Postage & Mailing	500.00
Printing	500.00
Rent to Wayne County Medical Society	600.00
Salaries	14,166.67
Telephone & Telegraph	1,000.00
Travel & Entertainment	3,000.00
National Meeting Expense	2,500.00
Public Relations-County Secretary's Conference	2,500.00
County Society Meetings	300.00
Woman's Auxiliary	1,000.00
Miscellaneous Expense	200.00
Field Secretary's Office Expense	500.00
Field Secretary's Meetings	500.00
TOTAL EXPENSES	$ 27,566.67
GAIN FOR THE YEAR	3,633.33

THE JOURNAL

INCOME:	
Allocation from dues	$ 7,200.00
Subscriptions of others	600.00
Advertising Sales	51,000.00
Reprint & Cut Sales	3,000.00
Misc. Income (Inc. Disc. Taken)	600.00
TOTAL FUNDS AVAILABLE	$ 62,400.00
EXPENSES:	
Editor's Expense	$ 2,400.00
Printing, Mailing & Postage	36,000.00
Reprint & Cut Expense	2,000.00
Salaries	10,101.00
Discounts & Commissions on Advertising Sales	10,750.00
Miscellaneous Expense	100.00
Cash Discounts Allowed	225.00
Telephone & Telegraph	30.00
TOTAL EXPENSES	$ 61,606.00
GAIN OR LOSS ON *THE JOURNAL* (Gain)	$ 794.00

MICHIGAN CANCER CO-ORDINATING COMMITTEE—1954

Balance on hand Jan. 1, 1954		$ 2,848.82
INCOME:		
American Cancer Society, Mich. Division Units (5%)		$ 2,000.00
American Cancer Society, Southeastern Mich. Division		2,000.00
Michigan State Medical Society		2,000.00
		$ 8,848.82
EXPENSES:		
Stenographer	$ 960.00	
Telephone	388.82	
Postage	175.00	
Office supplies and expenses	300.00	
Printing	225.00	
Committee meeting expense	600.00	
Travel expense	500.00	
Auditing	50.00	
Sixth Cancer Conference	1,000.00	
Reserve for studies	1,375.00	
Reserve for publications	2,275.00	
Secretary's expense	1,000.00	
		$ 8,848.82

RHEUMATIC FEVER CONTROL PROGRAM

INCOME:	
Michigan Heart Association	$ 32,050.00
TOTAL INCOME	$ 32,050.00

EXPENSES: (Based on Estimates Furnished by Rheumatic Fever Control Committee Jan. 20, 1954)

Central Office Expense	
Committee Meetings	$ 500.00
Equipment & Repairs	200.00
Payroll Taxes	250.00
Postage	200.00
Printing & Mailing	650.00
Office Supplies	50.00
Publications & Pamphlets (Purchased)	100.00
Salaries—Administrative	10,000.00
Salaries—Office	600.00
Travel	1,500.00
Fellowships	3,000.00
Special Equipment	1,000.00
Furniture & Fixtures	500.00
Laboratory Aid Plan	3,000.00
Telephone & Telegraph	200.00
TOTAL EXPENSES (Central Office)	$ 21,750.00

Control Center Expenses

Alpena	$ 200.00
Ann Arbor	450.00
Bay City	750.00
Benton Harbor	200.00
Detroit	1,500.00
Grand Rapids & Muskegon	3,900.00
Jackson	100.00
Kalamazoo	1,000.00
Lansing	100.00
Petoskey	100.00
Pontiac & Royal Oak	500.00
Saginaw	200.00
Sault Ste. Marie	100.00
Traverse City	1,200.00
TOTAL EXPENSES (Control Centers)	$ 10,300.00
TOTAL EXPENSES	$ 32,050.00
BALANCE FROM PRIOR YEARS	$ 9,571.69
BALANCE TO 1955	$ 9,571.69

Centers Not Activated: Battle Creek, Flint, Marquette, Port Huron (Inactive).

PUBLIC EDUCATION ACCOUNT

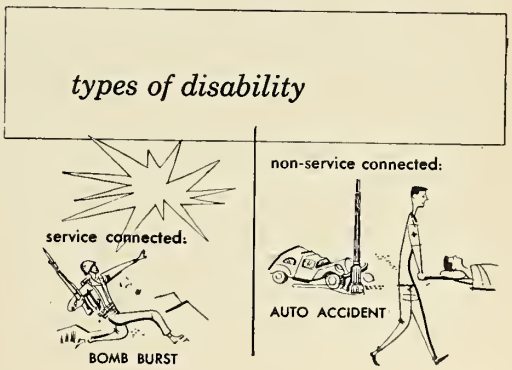
INCOME:	
Allocation from Dues—1954	$ 43,200.00
Other Income (Sale of pamphlets and films)	250.00
	$ 43,450.00
EXPENSES:	
Clipping Service	220.00
Committee Meetings	300.00
Equipment & Repairs	500.00
Postage & Mailing	1,000.00
Printing	500.00
Office Supplies	1,000.00
Salaries	14,166.67
Telephone & Telegraph	500.00
Travel & Entertainment	1,500.00
Cinema	5,000.00
Display Advertising	1,000.00
Newspapers	500.00
Publications & Pamphlets (Purchased)	5,000.00
Radio	500.00
Miscellaneous Expense	200.00
TV & Radio Programs	5,000.00
TOTAL EXPENSES	$ 36,886.67
GAIN FOR THE YEAR	$ 6,563.33

Defense Secretary Wilson has eliminated 160,173 unnecessary jobs from the military payroll, with resulting savings of $800,000,000.00 per year. Despite this job reduction, the combat forces in each of the services has been strenghened.

For example, the air force which discarded more needless jobs than any other service, was none-the-less able to add five more combat wings besides four new wings planned originally—without adding to existing personnel.

In other words, real economies are being made in the defense establishment by the obvious process of pruning the "chairborne corps."—Paul Shafer, M.C., Michigan 3rd District.

In Viewing the VA Medical Program . . .



The medical profession fully endorses and supports the medical program of the Veterans Administration through which veterans receive medical care and hospitalization without cost for illnesses or injuries incurred as a result of military service (left). It is felt, however, that the federal government should not assume the responsibility for the medical care of veterans whose disabilities are incurred in civilian life and which have no relationship to their military service.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

BLOOD PROGRAM ATTAINS TWO MAJOR OBJECTIVES

The network of local and regional blood banks in the state has now grown to the point where they assure ample supplies of fresh blood to local hospitals, are able to handle emergency supplies for each other, and can guarantee to the department sufficient outdated and surplus blood for the processing of sufficient plasma, fibrinogen and antihemophilic globulin for the needs of Michigan people. There are now 64 blood banks voluntarily joined in the co-operative program and the number is increasing.

The second objective attained is that the department no longer has to rely upon blood collection from donors for whole blood from which to manufacture gamma globulin and normal serum albumin. After six years of research, a method has been perfected in the department laboratories of recovering gamma globulin and normal serum albumin from human placentas. A supply of 50,000 placentas a year has been assured the department from 22 co-operating hospitals and further expansion is planned of this source of supply.

ABOUT ANTIHEMOPHILIC GLOBULIN

Many Michigan physicians have asked for additional information about Antihemophilic Globulin. To answer these questions the Division of Laboratories prepared the following summary of the present status of the product.

Antihemophilic Globulin is a protein fraction of normal human plasma, not identical with prothrombin, thrombin or fibrinogen. It is prepared as a dried powder in a sterile glass bottle and is distributed together with sterile pyrogen-free distilled water for reconstitution. No preservative has been added, and there is no U. S. Standard of Potency for this product. It is prepared from fresh human plasma irradiated with ultraviolet light to destroy viral contaminants, including the agents or agent of viral hepatitis.

At the present time the Michigan Department of Health is the only agency in the world which manufactures and distributes this product. It is furnished without charge to any physician in Michigan. In counties served by regional blood centers of the American National Red Cross, requests should be made through the centers. In other areas, they should be sent to H. W. Wiley, M.D., Medical Director of the Blood and Blood Derivatives Unit, Division of Laboratories, Michigan Department of Health, Lansing 4.

Antihemophilic Globulin has been beneficial in the control of oozing-type hemorrhage in some, but not all, of the six types of hemophilia now recognized. Infants and young children appear to respond better than do adults who have a history of blood or plasma transfusions. Use of the product in postoperative and postpartum hemorrhage has been reported, but it is recommended that wherever a true hypofibrinogenemia exists, the Department's product, Human Fibrinogen, be used to conserve the limited supply of Antihemophilic Globulin.

For the treatment of all types of hemophilia, the only products known to be effective are fresh whole blood and freshly prepared plasma. It is essential that the blood or plasma be fresh, since some of the blood clotting components are destroyed during storage. In those cases where Antihemophilic Globulin does not control hemorrhage, a freshly prepared, dried plasma is available from the Hyland Laboratories, Los Angeles, California. This product is labeled Antihemophilic Plasma.

The prophylactic use of Antihemophilic Globulin is not recommended at the present time.

The Michigan Department of Health is very anxious to receive written reports from physicians who use Antihemophilic Globulin or fibrinogen and for each time it is administered. These reports are the only mechanism which the department has available for evaluation of the product.

FOR PRESCHOOL CHILDREN WITH A HEARING LOSS

Parents of preschool children with a hearing handicap will be interested in the 14th Annual Parent Institute-Nursery School to be held at the Michigan School for the Deaf in Flint from March 28 through April 3. Hearing consultants of the department are co-operating in this program.

CONFERENCE ON INDUSTRIAL HEALTH

The Sixth Annual Industrial Health Conference will be held in Muskegon on May 18.

TRAINING TEACHERS FOR EXPECTANT PARENTS CLASSES

As a part of its program of assisting local groups interested in classes for expectant parents, the department is sponsoring a short course on organization and program content of such classes with attendance limited to 25 nurses.

There is no cancer so very early that we can guarantee a cure and there are few cancers that are so extremely far advanced, at least in their local extent, but what we are sometimes surprised to find that they are controllable.

* * *

It must always be borne in mind that the presence of another possibly adequate cause for a particular symptom *does not* exclude the possibility of a concomitant malignant growth.

* * *

The patient in whom a complete diagnostic study for renal neoplasm reveals suspicious but not diagnostic findings should have renal exploration.

Clinical Results* with Banthine® Bromide

(Brand of Methantheline Bromide)

22 Published Reports Covering Treatment of 1443 Peptic Ulcer Patients with Banthine

Comprising the reports published in the literature to date which give specific facts and figures of the results of treatment

AUTHORS	No. of Patients	Chronic, Resistant to Other Therapy	TYPES OF ULCERS				RELIEF OF SYMPTOMS (Chiefly Pain)				Surgery or Complications[1]	Side Effects Requiring Discontinuance of Drug[2]	EVIDENCE OF HEALING			
			Duodenal	Jejunal	Stomal	Gastric	Good	Fair	Poor	No Report			Complete	Moderate	None	No Report
Grimson, Lyons, Reeves	100	100	93	7			80	11	4		5		47		19	29
Friedman	15	15	14			1	5		4	6[3]			2			13
Bechgaard, Nielsen, Bang, Gruelund, Tobiassen	26	26	21			5	16	4	6				8	6	12	
McHardy, Browne, Edwards Marek, Ward	162		162				136	12	11		3	1	14	9	7	129
Segal, Friedman, Watson	34	34	34[4]				14	13			7	2	5		8	14
Brown, Colfins	117	99	117				97	7	8		5	8	55	9	8	40
Asher	77		65		7	5	52	9	16			16		9	21	47
Rodriguez de la Vega, Reyes Diaz	5	4	5				4		1					3	2	
Winkelstein	116	116	102	8		6	102		14				53		18	45
Hall, Hornisher, Weeks	18	18	18				11		1	6[5]			18			
Maier, Meili	38	38	24			14[6]	27	7	4[7]				10	2	5	21
Meyer, Jarman	25	18	25				21		4							25
Poth, Fromm	37	37	37				33	3	1				33	3	1	
Plummer, Burke, Williams	41	41	41				36		5				38		3	
McDonough, O'Neil	104	100	104				63	10	31			11	4		11	89
Broders	60	60	58		1	1	35	19	6				10	1	49[8]	
Legerton, Texter, Ruffin	11		11				11									11
Holoubek, Hotoubek, Langford	76	69	76				35	27	10		4	10	26		10	36
Dgborn	42		39	2		1	42[9]									42
Shaiken	48	48	48				33	10	3		2		33	10	3	
Johnston	145	145	145				143		2			2	143		2	
Rossett, Knox, Stephenson	146		141			5	146					4[10]	53			93
TOTALS	1443	968	1380	17	8	38	1142	132	131	12	26	54	552	52	179	634
PERCENTAGES		67.8	95.6	1.2	0.6	2.6	81.3	9.4	9.3			3.7	70.5	6.6	22.9	

1. Not included in tabulations.
2. Included in "Relief of Symptoms" as "Poor" and in "Evidence of Healing" as "None."
3. Four had no symptoms when Banthine therapy was begun.
4. Of which seven were penetrative lesions and five partially obstructive.
5. No symptoms were present in four.
6. Two with symptoms only; no demonstrable ulcer.
7. Three were psychopathic patients and one had a ventricular ulcer of the lesser curvature.
8. Roentgen findings after treatment period of two weeks; forty-seven had duodenal detormity.
9. All returned to work within a week.
10. In these four, after relief of symptoms, Banthine was discontinued because of urinary retention.

During the past three years, more than 250 references to Banthine therapy in peptic ulcer and other parasympathotonic conditions have appeared in medical literature. Of these reports, 22 have presented specific facts and figures on the results of treatment in a total of 1,443 peptic ulcer patients, 67.8 per cent of whom were reported as chronic or resistant to other therapy. These results are tabulated above and show:

"Good" relief of symptoms was obtained in 81.3 per cent of the 1,405 patients on whom reports were available.

"Complete" evidence of healing was obtained in 70.5 per cent of the 783 patients on whom reports were available.

In all but 9.3 per cent, relief of pain was "good" or "fair." In all but 22.9 per cent, evidence of healing was "complete" or "moderate."

During treatment, 26 patients required surgery or developed complications other than ulcer which required discontinuance of the drug before results could be evaluated.

Of the remaining 1,417 patients, only 3.7 per cent experienced side effects sufficiently annoying to require discontinuance of the drug.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

*Volume containing complete references, with abstracts of 39 additional reports, will be furnished on request by

G. D. Searle & Co.
P. O. Box 5110, Chicago 80, Illinois

In Memoriam

ANTHONY H. LANGE, M.D., of Detroit, died November 30, 1953, in Miami Beach, Florida, after becoming ill while on a West Indies cruise with his wife. He was sixty-one years old.

Dr. Lange was a graduate of the University of Michigan School of Medicine and had practiced in Detroit since 1918. He was a staff member of Deaconess Hospital. He was active in the affairs of the Wayne County Medical Society, being Chairman of its Insurance Studies Committee at the time of his death.

He served in the Army Medical Corps during World War I.

Survivors include his wife, Edna; a daughter, Mrs. William Phelps; two sisters and two brothers.

GUY M. McDOWELL, M.D., former president of the Bay County Medical Society, died January 7, 1954, in Bay City. He was seventy-four years old.

Dr. McDowell was a native of Dalton, Ohio, and a graduate of Ohio State University. He moved to Bay City in 1907 and practiced there until 1928. At that time he entered the Michigan State Sanatorium at Howell, joining its medical staff in 1930 and remaining until his retirement in 1949, at which time he returned to Bay City.

Dr. McDowell served as President of the Livingston County Medical Society. He was made a life member of MSMS in 1951.

He is survived by a daughter, Mrs. Whitney Collins of Grosse Pointe, and three grandsons.



WYLLYS A. MANTHEI, M.D., of Lake Linden, for many years chief of the medical staff for Calumet and Hecla, Inc., died December 4, 1953. He was sixty-three years old.

Dr. Manthei was born in Marquette. He was graduated from Marquette High School and from the University of Michigan Medical School in 1912. He first served on the medical staff of the Copper Range Mining Company, then was associated with the Lake Superior General Hospital at Lake Linden until 1938, when he joined the medical staff of Calumet and Hecla, Inc.

Dr. Manthei was a Fellow of the American College of Surgeons and past president of the Houghton County Medical Society and the Upper Peninsula Medical Society. He also served as a Councilor for MSMS. Civic activities included charter membership in the Lake Linden Lions Club and membership on the Lake Linden School Board for 25 years.

Surving are his widow, Ruth; a son, Wyllys, and two daughters, Mrs. Mark Cross of Salt Lake City, Utah, and Mrs. Donald Rose, of Lake Linden.

HARRY W. PLAGGEMEYER, M.D., past president of both the Wayne County Medical Society and the Detroit Academy of Medicine, and former chief of urology at Grace Hospital, died December 19, 1953, in Detroit. He was seventy-two years old.

Dr. Plaggemeyer had retired from his Grace Hospital position seven years ago, but remained active as a consultant until his death.

A native of Baltimore, Dr. Plaggemeyer came to Detroit in 1913 to the Detroit General Hospital, now Henry Ford Hospital.

He was graduated in medicine from Johns Hopkins University in 1907 after studying abroad at Oxford and in Germany. As a young doctor of medicine, he was the first assistant at Johns Hopkins to Hugh Young, M.D. who established the specialty of urology. It was during this period that Dr. Plaggemeyer served as personal physician to the well-known figure "Diamond Jim" Brady. Mr. Brady later gave $1,000,000 to establish the Brady Urologic Institute at Johns Hopkins.

During World War I, Dr. Plaggemeyer served as a captain in the Army Medical Corps and was chief of the division of urology at Walter Reed Hospital in Washington.

Among his many activities, Dr. Plaggemeyer served as associate professor of urology at Wayne University and as a postgraduate assembly speaker at the University of Michigan. He was a member of the American Urological Association and a past president of the North Central Section of that organization. Dr. Plaggemeyer was also a Fellow of the American College of Surgeons.

Dr. Plaggemeyer was a brilliant pianist, and in his younger days, an excellent amateur boxer and swimmer. He was ardently interested in athletics up to his final illness.

Dr. Plaggemeyer is survived by his wife, Edith, and a daughter, Mrs. J. Boyer Candler.

OLD AGE PAYMENTS GAIN IN MICHIGAN

Payments of federal old-age and survivors insurance increased 19 per cent in Michigan in 1952, the regional office of the U. S. department of health, education and welfare has announced.

At the end of 1952 the department had paid $107,244,000 to 170,795 persons in Michigan, officials said.

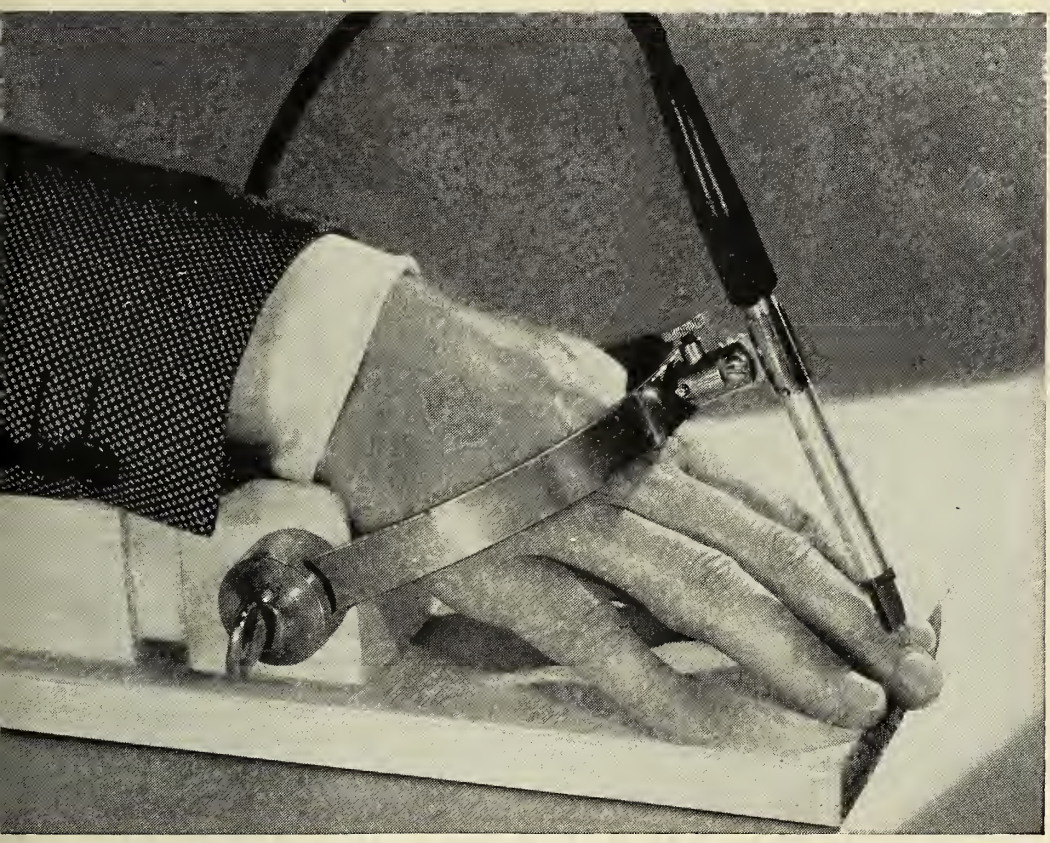
Average payments to Michigan retired workers was $53.33 during 1952, as compared with $49.25 for the nation as a whole. J. Kimball Johnson pointed out that this reflects higher wages in Michigan.

In Michigan, 14.8 per cent of the retired workers receive the minimum payment of $25, while 32.3 per cent receive between $65 and the maximum of $85. Throughout the nation 19.7 per cent receive the minimum and 22.3 receive from $65 to the maximum.

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NEWS MEDICAL

MICHIGAN AUTHORS

Oliver B. McGillicuddy, M.D., Lansing, is the author of an article entitled "Facial Nerve Paralysis of Twenty Years' Duration" published in *A.M.A. Archives of Otolaryngology,* September 1953.

Traian Leucutia, M.D., Detroit, is the author of an article entitled "Newer Developments in Radiation Therapy in Cancer" published in the *Wisconsin Medical Journal,* December 1953.

Herbert E. Pederson, M.D., and **A. Jackson Day, M.D.**, Detroit, are co-authors of an article entitled "Dupuytren's Disease of the Foot" published in *The Journal of the American Medical Association,* January 2, 1954.

Robert C. Moehlig, M.D., and **Albert L. Steinbach, M.D.**, Detroit, are co-authors of an article entitled "Cortisone Interference with Calcium Therapy in Hypoparathyroidism" published in *The Journal of the American Medical Association,* January 2, 1954.

Edward F. Purcell, M.D., Leonard H. Lerner, M.D., and **V. Everett Kinsey, Ph.D.**, Detroit, are authors of an article entitled "Ascorbic Acid in Aqueous Humor and Serum of Patients With and Without Cataract," published in *A.M.A. Archives of Ophthalmology,* January, 1954.

John W. Burgess, M.D., Ann Arbor, is the author of an article entitled "A History of Infant Feeding," published in *University of Michigan Medical Bulletin,* December, 1953.

Carey P. McCord, M.D., Ann Arbor, is the author of the fourth of a series of articles entitled "Lead and Lead Poisoning in Early America," published in *Industrial Medicine and Surgery,* January, 1954.

Conrad R. Lam, M.D., Detroit, is the author of an article entitled "The Surgical Treatment of Cardiospasm —Preliminary Report" published in the *Texas State Journal of Medicine,* January, 1954.

Ruth David McNair, Ph.D., Dayton O'Donnell, M.D., and **William Quigley, M.D.**, Detroit, are authors of an article entitled "Protein Nutrition in Surgical Patients" published in *A.M.A. Archives of Surgery,* January, 1954.

F. D. Dodrill, M.D., Detroit, is the author of an article entitled "Experience with the Mechanical Heart" published in *The Journal of the American Medical Association,* January 23, 1954.

John F. Holt, M.D., Howard B. Latourette, M.D., and **Ernest H. Watson, M.D.**, Ann Arbor, are authors of an article entitled "Physiological Bowing of the Legs in Young Children," published in *The Journal of the American Medical Association,* January 30, 1954.

Paul de Kruif, Ph.D., Holland, is the author of an article entitled "Bursitis," published in *Today's Health,* February, 1954.

R. W. Emerick, M.D., L. E. Holly, M.D., A. H. Joistad, Jr., M.D., of Muskegon, and **K. E. Corrigan, Ph.D.**, of Detroit, are authors of an original article, "Diagnostic Use of Radio Isotopes in a General Hospital" which appeared in *J.A.M.A.* of February 6.

* * *

Records Fall in Fund Raising for Medical Education.— Here is a year-end financial picture of the two fund-raising organizations for the nation's 79 medical schools —the American Medical Education Foundation, founded by the A.M.A., and its co-operating agency, the National Fund for Medical Education with offices in New York.

As of December 31, 1953, the American Medical Education Foundation, working through its fifty-three state and metropolitan committees, recorded a gross return of $1,089,962.93 from 18,176 individual physicians, organizations and laymen. This is the first time that the foundation's annual income has passed the million dollar mark. The number of contributors in 1953 increased 149 per cent over the previous year.

The National Fund for Medical Education, which seeks its funds primarily from business and industry, has just announced that during the past year 994 corporations contributed $1,367,979. This represents an increase over 1952 of 74 per cent in contributions and 193 per cent in the number of participating firms. This record is a tribute to the leadership of 1,000 corporation executives who make up the forty-seven industry divisions and seventeen local sponsoring committees of the Committee of American Industry.

The two fund-raising organizations jointly have distributed nearly $5,000,000 to the nation's medical schools since 1951. Fifty per cent of this money has been contributed by the medical profession and others in the medical field.—*AMA Secretary's Letter.*

* * *

New President of the American Academy of Allergy is Dr. John M. Sheldon, of Ann Arbor. He was installed at the Academy's annual convention in Houston, Tex. Elected historian for the organization at the Houston meeting was Homer Howes, M.D., of Detroit.

* * *

At the A.M.A. Clinical Session in St. Louis, the House of Delegates adopted a resolution calling for the appointment by the Board of Trustees of "a special committee with broad repreesntation throughout the pro-

(Continued on Page 316)

Meat...

and Adequate Protein Nutrition of the Diabetic Patient

Although formerly it was considered desirable in diabetes mellitus to hold protein intake only slightly above minimal requirements in order to minimize metabolic activity, present day treatment recognizes distinct benefits resulting from liberal protein alimentation.[1] Generous allowances of protein heighten the patient's sense of well-being, improve vigor, and augment the organism's inherent protective forces.

For the adult diabetic, desirable daily allowances of protein range from 1 to 1.5 grams per kilogram of body weight.[1] To assure adequate amounts of protein for growth and maintenance in diabetic children, allowances should range from 2 to 3 grams per kilogram. Following acute episodes during periods of inadequate insulin treatment, the concomitant negative nitrogen balance calls for high protein feeding until lost nitrogen is restored.[2] Though caloric intake is restricted for correction of overweight, protein allowances remain unchanged.

Meat ranks high among the foods qualified to provide the desired amounts of protein in diabetic diets. In fact, meat—because its rich store of protein is of highest biologic value—may well contribute a large share of the diabetic's daily protein requirement.[3]

In addition, meat also provides important amounts of essential B vitamins and minerals. Its appetite appeal goes far in enabling the diabetic patient to stay on his prescribed diet.

---

1. McLester, J. S., and Darby, W. J.: Nutrition and Diet in Health and Disease, ed. 6, Philadelphia, W. B. Saunders Company, 1952, pp. 287-299.

2. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition. Prepared with Collaboration of the Committee on Therapeutic Nutrition, Food and Nutrition Board, National Research Council, Publication 234, 1952, p. 56.

3. Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Company, 1951, p. 634.

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(Continued from Page 314)

fession" to study "all aspects of the problems of public relations created by recent adverse publicity."

The resolution, introduced by Dr. John F. Burton of Oklahoma, referred specifically to "published statements of certain medical spokesmen concerning alleged unethical practices by members of the medical profession" which have "tended to destroy the confidence of patients in their physicians, without solving the basic problems involved."

The Board appointed the following five physicians to the committee and there is a possibility that two more will be appointed before the first meeting, which is scheduled to be held sometime this month:

Drs. Stanley R. Truman, chairman, Oakland, Calif.; John S. DeTar, Milan, Mich.; Leland S. McKittrick, Brookline, Mass.; James Q. Graves, Monroe, La., and Felix L. Butte, Dallas.

The committee has been instructed to report its findings and make whatever recommendations it deems necessary to the House when it meets in San Francisco in June.—*AMA Secretary's Letter.*

* * *

The new Medical Building for the Wayne University College of Medicine will be formally dedicated on Tuesday, May 11. The dedication ceremony is scheduled for 11:00 a.m. in the Medical Building, 1401 Rivard Street, Detroit.

At 2:00 p.m., a symposium on medical education will be presented by visiting deans of medical colleges and other outstanding medical educators. Additional information on this symposium, to which all members of the medical profession in Michigan are invited, will be included in a later edition of THE JOURNAL.

* * *

The Directors of the American Board of Obstetrics and Gynecology wish to express their thanks to the following gentlemen who responded so willingly to our request for help in proctoring the recent written examinations on Friday, February 5, 1954. Ward F. Seeley, Detroit, Michigan; F. W. Tamblyn, Lansing, Michigan; Clarence E. Toshach, Saginaw, Michigan.

The next scheduled examinations, Part II (oral and pathological), for all candidates will be held at the Edgewater Beach Hotel, Chicago, Illinois, May 10 to 17, 1954. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examinations.

* * *

Chances for good health in 1954 are "better than ever before," says Dr. Ernest H. Watson, associate professor of pediatrics at the University of Michigan's Medical School.

The doctor has some interesting statistics to warrant his optimism:

1. In 1933, for every 1,000 children born alive at least 40 died before reaching their first birthday. Today this mortality rate has been cut in half!

2. In 1933, five to seven mothers died for every 1,000 deliveries of living babies. Today this figure has been cut almost 90 per cent.

(Continued on Page 318)

WHEN SYMPTOMS ARE DISTRESSING BUT DISGUISED . . .

"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

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(Continued from Page 316)

3. Twenty years ago pneumonia was called the "Captain of Death." Today deaths from pneumonia and influenza make up only three per cent of the deaths.

4. Whereas diabetes and pernicious anemia were fatal in the past, today these illnesses are easily controlled and so easily managed that the sufferer may expect a normal life.

5. Epileptics have a rosier outlook. In more than three-fourths of all cases epileptic seizures can be controlled, permitting the person to smile at the future.

6. Even cancer, now the "Captain of Death," is yielding to medical research.

7. And for most anxious parents the promise of a polio vaccine is welcome news for the health picture of '54.

Dr. Watson closes his analysis of the medical future by saying, "Never before in the history of the world is it so safe to have a baby, or to be born."

* * *

Reserve physicians and dentists who are not currently under orders for active military duty may join the Ready Reserve Units of the Army Medical Service according to an announcement today by Maj. Gen. George E. Armstrong, Army Surgeon General.

This will be accomplished by permitting the special registrants under the Doctor Draft Act and others who are in a USAR Control Group to be transferred immediately to fill an authorized vacancy in a Ready Reserve Unit. Formerly, such a re-assignment was prohibited prior to the completion of a tour of extended active duty.

Although transferred, the officer will still be subject to an order to active duty without his consent as an individual classified under the Doctor Draft and will be subject, too, to an order to active duty as a member of the unit.

The transfer, however, is entirely voluntary and will be made only if the physician or dentist so desires.

An estimate of the possible numbers available for such re-assignment totals more than 900 Medical Corps officers and 183 Dental Corps officers.

* * *

A microscope which uses atomic particles to "see" how a living or metal structure fits together has been developed at the University of Michigan.

It will help the researcher who wants to know where atoms of one component of an alloy are located in metal and will aid the scientist who wants to locate a concentration of material in living tissue.

William Kerr, assistant professor of electrical engineering, worked on the microscope as a doctoral thesis under the supervision of Henry J. Gomberg, associate professor of electrical engineering and assistant director of the Michigan Memorial-Phoenix Project. The Atomic Energy Commission sponsored the work.

The new tool works in the following way: Specimens to be examined contain some radioactive atoms which emit beta rays, or tiny electrically charged particles. When the location of the greatest activity is determined

(Continued on Page 320)

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(Continued from Page 318)

by the microscope, the researcher can shift immediately to an ordinary microscope lens system for a visual examination of that section.

Similar information has been provided heretofore by a method involving the use of photographic plates. The new method is swifter, although not quite as accurate. However, an improved model of the microscope is now under construction to increase accuracy and ease of handling.

* * *

Dr. Thomas Francis, Jr., chairman of the Department of Epidemiology in the University of Michigan School of Public Health and one of the nation's leading authorities on epidemics, has agreed to direct an evaluation of the polio vaccine tests which will be conducted this spring, it was announced today by Basil O'Connor, president of the National Foundation for Infantile Paralysis.

Dr. Francis will organize and direct a staff which will make an independent study of the vaccine's effectiveness. No results of the evaluation will be available before 1955.

Dr. Francis made clear that while the National Foundation will finance the evaluation with a grant, the study will be completely independent. An evaluation center will be established at the University of Michigan and the University's Survey Research Center will assist in collecting data and preparing statistical analyses.

The actual field trials and inoculations will be conducted by state, county and community health officials for the National Foundation in areas determined by recommendations of State Health Officers. University researchers and scientists will record and evaluate the results of the test vaccine after it has been administered by designated agencies of the National Foundation. The tests will begin in late March or early April.

"I am impressed by the number of people who have expressed their willingness to support and collaborate in an integrated effort to conduct an objective, independent and adequately controlled evaluation," Dr. Francis said.

Although the trial vaccine will be triple-checked for safety before use, Dr. Francis pointed out that the vaccine's effect in controlling polio is not yet proved.

"It is not known at present whether the vaccine to be used will be highly effective, moderately effective or ineffective in protection of human subjects against paralytic poliomyelitis. . . .

"In an independent study of the results of the tests, we will attempt to insure an adequate measurement of the vaccine's influence through the collection and analysis of good and unbiased data."

Chairman of the University of Michigan Department of Epidemiology since 1941, Dr. Francis became the University's Henry Sewall Professor of Epidemiology in 1947. At that time he also was given the Lasker award for "distinguished contributions to our knowledge of influenza."

He has been consultant to the Secretary of War and the director of the Influenza Commission of the U. S.

(Continued on Page 322)

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(Continued from Page 320)

Army Epidemiological Board since 1941. He is also a member of the Committee on Growth of the Virus Panel of the National Research Council, is past president of the Society of American Bacteriologists, of the American Society of Clinical Investigation and of the American Association of Immunologists.

* * *



C. Allen Payne, M.D., Grand Rapids, was elected Chairman of the recently formed Michigan Cancer Co-ordinating Committee at its meeting of January 21 in Lansing. Harry M. Nelson, M.D., Detroit, was chosen as Vice Chairman. The Cancer Co-ordinating Committee is made up of representatives of the six Michigan organizations interested in cancer control: American Cancer Society, Michigan Division, Inc.; American Cancer Society, Southeastern Michigan Division; Michigan Department of Health; Michigan Health Officers Association; Michigan State Dental Society and the Michigan State Medical Society.

* * *

Frank H. Krusen, M.D., Rochester, Minnesota, frequent guest essayist on programs of the MSMS Annual Session and Michigan Clinical Institute, received the second annual Physician's Award from the President's Committee on Employment of the Physically Handicapped. The Award was made February 24 by Vice Admiral Ross T. McIntire (M.C.) USN Ret., Chairman of the Committee, during the Annual Meeting of the Congress on Industrial Health at Louisville, Ky.

Congratulations, Dr. Krusen!

* * *

Dan B. Kirby, M.D., New York City, guest speaker at the 1951 MSMS Annual Session in Grand Rapids, died suddenly at his home in Pelham, New York, on December 26. His loss to Medicine and particularly to the science of ophthalmology will be deeply felt.

* * *

Dr. and Mrs. Robert S. Breakey, Lansing, recently presented to the Beaumont Memorial Committee of the Michigan State Medical Society a total of 5,000 reprints of "William Beaumont, Pioneer Physiologist," an original manuscript of Frederick Stenn, M.D., Chicago, published in *JAMA* of July 4, 1953. The Beaumont Memorial Committee, at its January 30 meeting, instructed that these reprints be distributed on the occasion of the Beaumont Memorial Dedication, Mackinac Island, July 17, 1954.

The Beaumont Memorial Committee placed upon its minutes a vote of thanks to Dr. and Mrs. Breakey for their generous addition to the plans for making the Beaumont Memorial Dedication an event long to be remembered.

(Continued on Page 324)



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Few substances—natural or artificial—can offer the unique combination of qualities found in wine, the traditional beverage of moderation. Praised through the ages for its "tonic" effect, wine has been intensively studied since 1939 by American laboratory and clinical investigators. These modern tests have revealed the physiological basis for subjective theories of past years, and are now explaining the action and fate of wine and its components in the body.

Many of the important physiological properties of wine differ significantly from those of plain alcohol. Wine increases appetite and heightens olfactory acuity. It stimulates the flow of salivary juices. Buffered by its own natural salts and organic acids, it provides a mild, prolonged stimulation of gastric secretion. This same buffer effect makes the diuresis produced by wine a slow, moderate one.

Wine is also a ready and pleasant source of nutrient energy, and of absorbable iron and other essential minerals. The vasodilating action of wine aids toward improving circulation and increasing cardiac output.

A bit of sherry or light wine before meals, table wine with luncheon or dinner, or a glass of port at bedtime can add a welcome touch of interest and "elegance" to the daily routine of the convalescent and the elderly patient. The day seems shorter and brighter, and the night more pleasant and relaxed.

For a few cents a day your patients can have wines produced from the world's finest grape varieties, grown in an ideal climate and handled with consummate skill. Research information on wine is available upon request. Wine Advisory Board, San Francisco 3, California.

(Continued from Page 322)

Genesee County Cancer Day.—Leonard A. Scheele, M.D., Surgeon General of the United States Public Health Service, and five doctors of medicine nationally prominent in the field of cancer will participate in the ninth annual Cancer Day program of the Genesee County Medical Society on April 12. The program, which draws physicians and surgeons from throughout Michigan and the midwest, will be held in the auditorium of Hurley Hospital, Flint.

The guest speakers will be: Howard C. Taylor, M.D., New York; Emerson Day, M.D., New York; Frederick A. Coller, M.D., Ann Arbor; Eugene P. Pendergrass, M.D., Philadelphia, and O. A. Brines, M.D., Detroit.

The visitors will participate in a panel discussion, after delivering individual papers.

William Bromme, M.D., of Detroit, Chairman of the MSMS Council, will preside at the morning session. Harry M. Nelson, M.D., Detroit, President of the American Cancer Society, will preside in the afternoon. Directing Cancer Day arrangements for Genesee County Medical Society are H. B. Elliott, M.D., and S. T. Flynn, M.D.

* * *

Wm. A. Hyland, M.D., Grand Rapids, Chairman of Michigan's Delegation to AMA House of Delegates, has been appointed by AMA Speaker James R. Reuling, M.D., Bayside, N. Y., to a Committee of the AMA House of Delegates to study "Essentials of an Approved Internship," following instruction of the AMA, December, 1953, Clinical Session in St. Louis, Mo., that such a Committee be appointed.

* * *

Membership in Two State Associations.

Question.—Can a Doctor of Medicine, licensed to practice in both Michigan and Wisconsin, be permitted to join a county and the state medical societies of Michigan and also of Wisconsin?

Answer.—"It is the opinion of the Judicial Council of the American Medical Association that a physician can hold membership in but one constituent association and *that* only in the jurisdiction in which he practices and conducts his professional activities."

* * *

The Woman's Auxiliary of the Ingham County Medical Society entertained the wives of Michigan's legislators at a "Guest Coffee" at the Hotel Olds, Monday night, February 15.

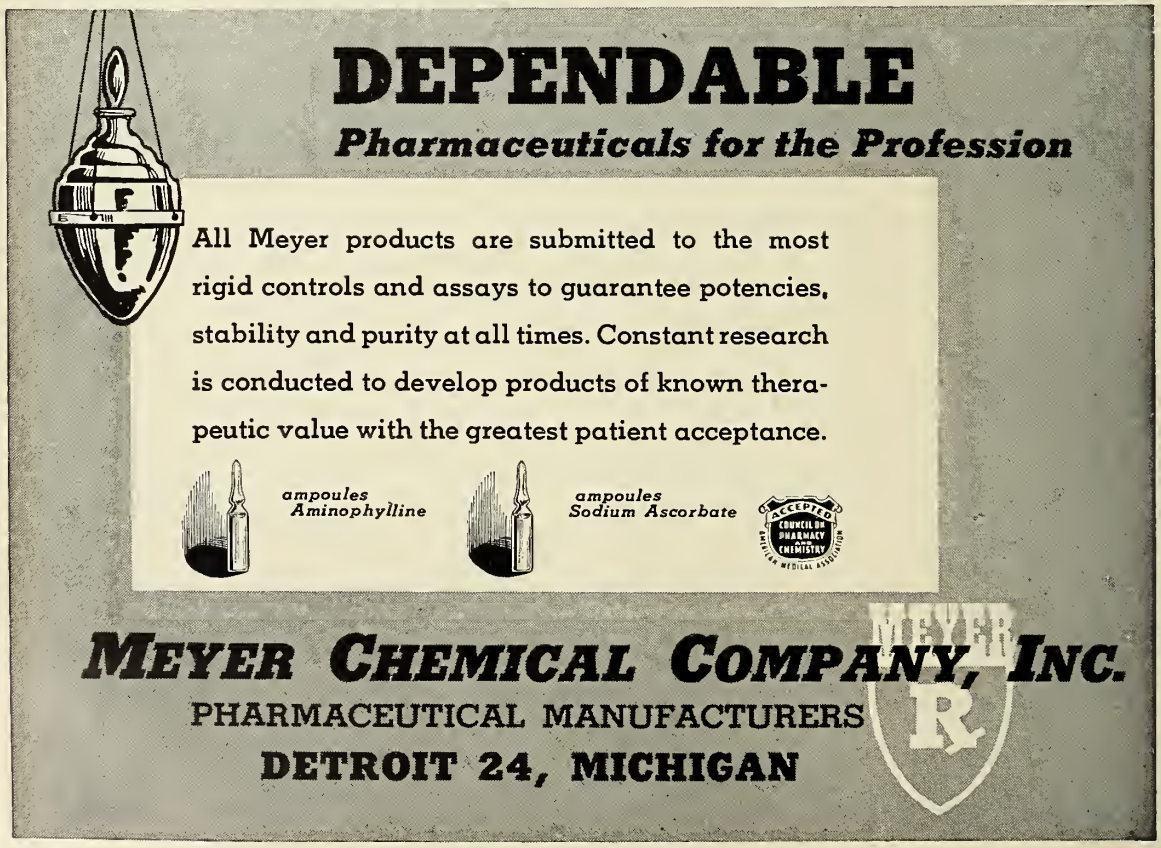
A program of music, drama and ballet was presented by students of Michigan State College.

Officers of Auxiliaries of the Ingham County Bar Association, Dental Association and Medical Assistants Society also were invited. Mrs. John M. Wellman, Lansing, was Chairman.

* * *

Memorial Contributions.—All funds used by the Michigan Heart Association are obtained from contribu-

(Continued on Page 326)



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(Continued from Page 324)

tions to the United Health and Welfare Fund of Michigan. However, exception has been made so that contributions in memory of the deceased may be made directly to the Michigan Heart Association. Appropriate acknowledgment cards are sent to the donor and the family of the deceased when such contributions are made. *Memorial contributions are used exclusively for heart research studies aimed at the conquest of heart diseases.*

* * *

William J. Stapleton, Jr., M.D., Michigan's Foremost Family Physician, will be honored at a testimonial dinner at the Sheraton-Cadillac Hotel in Detroit on May 11, 1954.

Dr. Stapleton, who holds degrees in medicine, pharmacy, and law, joined the faculty of the Wayne University College of Medicine in 1910. From 1936 to 1947, he served as Professor of Medical Jurisprudence and Economics and was the Associate Dean of the College. Upon his retirement from the teaching faculty, he was named professor emeritus.

Since his graduation from medical school in 1902 he has, in addition to his college assignments, maintained an active general practice in medicine. For twenty-three years, he has prepared reviews of a list of 100 books for the doctor which is published in the *Detroit Medical News*. His interest in the literature of the medical profession prompted him to serve as treasurer of the Wayne University Medical Library Fund.

"To tangibly express our great admiration, respect, and appreciation for Dr. William J. Stapleton, Jr., his medical colleagues, friends, and Wayne University alumni are planning to dedicate a memorial room in the new Wayne University Medical Library to be known as the 'William J. Stapleton, Jr., Room.' Here his professional colleagues in medicine and law may gather in the pursuit of knowledge and all who desire enlightenment may come and enjoy the books that have been the hobby, the joy, and the great passion of his life," stated Don W. McLean, M.D., chairman for the dinner.

Friends of Dr. Stapleton are cordially invited to join in this testimonial to Michigan's Foremost Family Physician. A reception will be held at 6:30 in the Italian Garden of the Sheraton-Cadillac Hotel and dinner will be served promptly at 7:15, Tuesday, May 11. Dress will be optional.

The committee, sponsored by the Wayne University College of Medicine Alumni Association, includes the following: Don W. McLean, M.D., Detroit, Chairman; Duncan A. Cameron, M.D., James E. Cole, M.D., Edwin H. Fenton, M.D., John E. Hauser, M.D., Leroy W. Hull, M.D., Ralph A. Johnson, M.D., James E. Lofstrom, M.D., Lawrence A. Pratt, M.D., Lawrence Reynolds, M.D., Dean Gordon Scott, Mr. Homer D. Strong, Karl Swift, M.D., Elmer C. Texter, M.D., John E. Webster, M.D., all of Detroit; and Wm. J. Burns, LL.B., Lansing.

* * *

The American Goiter Association will hold its annual meeting at the Somerset Hotel, Boston, April 29-May 1, 1954.

Say you saw it in the Journal of the Michigan State Medical Society

J. Duane Miller, M.D., Grand Rapids, a member of The Council of the Michigan State Medical Society, has been elected Chairman of the Permanent Conference Committee for the year 1954. This Committee is composed of representatives from the Michigan State Medical Society, the Michigan Hospital Association, the Michigan League for Nursing, and the Michigan State Nurses Association. The Committee has been in existence five years and studies problems of mutual interest to the three healing professions indicated above.

* * *

Thomas Francis, Jr., M.D., Ann Arbor, has accepted an assignment from the National Foundation of Infantile Paralysis to direct an evaluation of the polio vaccine tests which will be conducted this spring.

* * *

The American Journal of Gastroenterology is the new name of the official publication of the National Gastroenterological Association. This follows "The Review of Gastroenterology" which has been published since 1911.

* * *

"Grist of a Decade" recently was presented to A. C. Pfeifer, M.D., of Mt. Morris, by the Genesee County Medical Society. The "Grist" is a compilation of editorials written by Dr. Pfeifer during his ten years' service as Editor of the Genesee County Medical Society Bulletin. The volume is a monument to Dr. Pfeifer's work over the years as well as to the brilliance of his writings and their import on medical thinking not only in Genesee County but throughout the state and nation.

* * *

Lafon Jones, M.D., of Flint, was honored with a testimonial dinner and the presentation of a watch by sixty mothers of his patients, in appreciation for his work with children.

The affair was a surprise Christmas party in his honor. Congratulations, Dr. Jones!

* * *

Harry M. Nelson, M.D., Detroit, Immediate Past-President of the American Cancer Society, was Chairman of the very successful luncheon honoring Sykes Lecturer Eugene P. Pendergrass, M.D., of Philadelphia, held at the Sheraton-Cadillac Hotel, Detroit, on March 10, during the Michigan Clinical Institute.

A Scroll of Appreciation was awarded the Sykes Lecturer by the Michigan State Medical Society, with President L. W. Hull, M.D., making the presentation.

* * *

Detroit's Mt. Carmel Mercy Hospital Clinic Day attracts the usual hundreds of Doctors of Medicine. The 15th Annual Clinic Day resulted in a clinic registration of 472, with over 500 attending the banquet in the Statler Hotel.

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The Program Committee was headed by L. W. Gardner, M.D., and J. W. Pichette, M.D. Recognized at the banquet were O. A. Capano, M.D., President, E. R. Sherrin, M.D., Vice President, and J. R. Delaney, M.D., Secretary-Treasurer of the Staff.

Clinic speakers included Charles A. Doan, M.D., Columbus; Warren H. Cole, M.D., Chicago; Maurice C. Pincoffs, M.D., Baltimore; Lauren V. Ackerman, M.D., St. Louis; Meredith Campbell, M.D., New York; Walter T. Dannreuther, M.D., New York; Henry W. Cave, M.D., New York, with the luncheon speaker being Simon D. DenUyl, M.D., of Detroit.

An interesting scientific exhibit on "Hurthle Cell Tumors of the Thyroid Gland" was presented at the Clinic by Lawrance Wm. Gardner, M.D., Detroit.

* * *

Clark D. Brooks, M.D., and Harry M. Nelson, M.D., both of Detroit, received the honorary degree of Doctor of Laws from Wayne University during mid-year commencement exercises on February 2.

Dr. Brooks, a native of Michigan, was graduated from the Detroit College of Medicine and Surgery in 1905; member of Harper Hospital staff, Detroit, since 1909, he is now consulting surgeon at Harper and at Receiving Hospital and at Highland Park General Hospital. He was elected to the Detroit Board of Education in 1939 and just completed 15 years of distinguished service as a member. His citation read: "Today Wayne University is stronger and of larger service to this community as a result of Dr. Brooks' friendly counsel and earnest support."

Dr. Nelson, born in Pennsylvania, was graduated from the University of Michigan Medical School. Since 1933 he has been Chief Gynecologist, Senior Obstetrician, and Chief of the Tumor Clinic at Woman's Hospital, Detroit; attending surgeon at Detroit Receiving Hospital; member of the faculty of Wayne University College of Medicine since 1936.

One of the founders and president for 14 years of the Southeastern Michigan Division of the American Cancer Society, he is Immediate Past President of the American Cancer Society. Dr. Nelson was largely responsible for the founding of the Detroit Institute of Cancer Research, has served as President of the Institute, and as a member of the Board since its establishment. He worked for the affiliation of the Detroit Institute with Wayne University. He is Vice Chairman of the Michigan Cancer Co-ordinating Committee. His citation stated: "Dr. Nelson for many years has been a moving spirit in cancer research activities on local, regional and national levels. In all of his activities he has given a vigorous leadership, and enlightened and abiding concern for the health and well-being of people. As a renowned figure in present-day medical research, he has gained in full measure the admiration and gratitude of Wayne University, of this city and state and nation."

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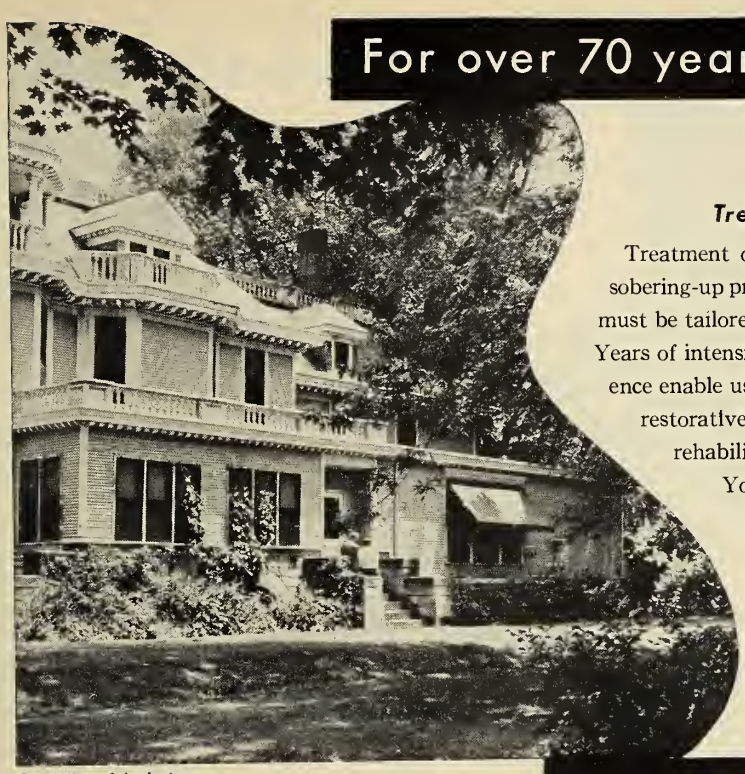
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A. Hazen Price, M.D., Detroit, Chairman of the MSMS Geriatrics Committee, and **Martin H. Hoffman, M.D.**, Detroit, participated in the Second Conference on Convalescent and Nursing Home Management held at Michigan State College, February 15-16, 1954.

* * *

The Annual Communion Breakfast of the Catholic Physicians Guild will be held on Laetare Sunday, March 28, 1954, at Sacred Heart Seminary, Detroit at 9:00 a.m.

The Speaker will be Rt. Reverend Donald A. McGowan of Boston, now in charge of the health and welfare department of the National Welfare Conference and formerly Superintendent of St. Elizabeth Hospital in Washington, D. C. His topic will be "Science, Citizenship and Sanctity."

All Catholic Doctors of Medicine are invited to attend.

Tickets may be procured from the local Hospital chairman or at the seminary on the day of the breakfast.

* * *

D. J. McColl, M.D., Port Huron, was honored by the St. Clair County Medical Society at a special meeting on February 9 at the Black River Country Club.

Congratulations, Dr. McColl!

* * *

Medical society dues can be deducted when computing federal income tax returns. The Bureau of Internal Revenue instructions state: "You can deduct cost of dues of professional societies."

What they thought about the MSMS Annual County Secretaries-Public Relations Conference of January 31 in Detroit:

"I am delighted I stayed over to attend the perfectly delightful Sunday presentations. They were high class all the way through and reflected much credit on all who contributed to that unique thought-provoking altogether satisfying program. Orchids to all."

"I would like to say that, although I have invariably learned something from each of the previous annual County Secretaries meetings, I enjoyed this one more than any other and think it was very interesting."

"May I congratulate you on the good program you presented to the County Medical Secretaries. It was very evident that it met with success and enthusiasm."

"May I thank you personally for the wonderful instructive and extremely well-planned meeting at the Annual Conference, Sunday, January 31. As a new secretary in a new organization it was an instructive and enjoyable affair for me."

"I appreciate the privilege of attending this conference. It was both informative and interesting."

"Thanks for inviting us. It gave us a lot of food for thought. We really enjoyed it. The skit presentations were wonderful. Thanks again."

"Just to tell you how much I enjoyed attending the Annual County Secretaries-Public Relations Conference of MSMS last Sunday in Detroit. We are quite enthusiastic about those wonderful skits you used to get

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the morning session rolling. In fact, we at the AMA are seriously considering adopting the technique and using it at our Public Relations Institute in Chicago next fall. Thanks again for the opportunity of attending a really top-notch state-county meeting."

* * *

Question: Who are the individuals we select as members of our Michigan House of Representatives?

Answer: The people choose Representatives from all walks of life. The 1954 Legislature is a good example. Members of the House include eighteen farmers, sixteen attorneys, eight insurance men, seven real estate brokers, five retail merchants, and four salesmen. There are two each of the following: Advertising men, bailiffs, chemists, county officers, drug store owners, property managers, timber dealers, toolmakers, and CIO union representatives. There is one from each of the following classifications: Accountant, auto agency owner, auto transporter, bridge crane operator, broker, building contractor, Chamber of Commerce secretary, deputy city treasurer, railroad claim agent, college student, councilman, county drain commission supervisor, county drain commission engineer, creamery operator, dairyman, deputy sheriff, electric company agent, mechanical engineer, engineering illustrator, fair secretary, fair director, farm implement dealer, general store owner, hardware store owner, township health officer, department of public works inspector, insurance company secretary, machinist, manufacturer, mink farm owner, newspaper publisher, paper maker, parts inspector, pharmacist, plumbing and heating contractor, railroad president, steel rigger, shoe store owner, teacher, theater owner, trout propagator, and Clothing Workers Union representative.

* * *

David Littlejohn, M.D., recently retired director of the Wayne County Department of Health, was honored for his long service and contributions to improve public health in Michigan by receiving the Public Health Award of the Michigan Health Council at the Michigan Rural Health Conference, Saginaw, January 14-15. The award was presented by A. E. Heustis, M.D., Lansing, State Health Commissioner.

* * *

J. Joseph Herbert was given a special award for distinguished service in the field of health by the Michigan Health Council at the Seventh Annual Michigan Rural Health Conference held in Saginaw, January 14-15.

An attorney from Manistique, Mr. Herbert is Chairman of the Board of Regents of the University of Michigan and is also Legal Counsel to the Michigan State Medical Society. The presentation was made by J. R. Rodger, M.D., Chairman of the MSMS Rural Health Conference.

* * *

The Andrew S. Brunk Award, named for the late Past President of the Michigan State Medical Society, was presented by the Michigan Health Council to the Kalamazoo Health Council in recognition of its contribution to health betterment. Among the projects

accomplished by Kalamazoo in 1953 were a program involving care for the aged, work on a convalescent and nursing home care program, study of the Reid Report, mental health problems, and publication of a Health Council History, etc.

* * *

Wadsworth Warren, M.D., Detroit, will be guest speaker before the scientific assembly of the American Medical Association in San Francisco, June 21-25. Dr. Warren's subject, "Tracheotomized Child, Wetting Agents," will be presented before the Section on Laryngology, Otology and Rhinology.

* * *

A **Summer Camp for Diabetic Children** will be opened for the sixth season under the auspices of The Chicago Diabetes Association, Inc., from July 18, 1954, to August 8, 1954, at Holiday Home, Lake Geneva, Wisconsin.

In addition to the regular personnel of the camp, there will be a staff of resident physicians and dietitians, trained in the care of diabetic children, furnished by The Chicago Diabetes Association.

Boys and girls, ages eight through fourteen years, are eligible. For further information regarding fees, interested persons should be directed to write or phone the office of The Chicago Diabetes Association. Fees will be set on a sliding scale to meet individual circumstances.

Physicians are requested to notify parents of diabetic children and to supply the names of children who would like to attend camp. Applications may be obtained from, and inquiries should be addressed to: The Chicago Diabetes Association, 5 South Wabash Avenue, Chicago 3, Illinois.

Limited capacity requires prompt application.

* * *

M.D. PLACEMENT BUREAU REPORT

November, 1953—January, 1954

Rudolph M. Jarvi, M.D., Saginaw (from Michigamme)
Ingram J. Kleaveland, M.D., Muskegon (from Military Service)
John Scott, M.D., Frankfort (from Detroit)
Robert D. McKnight, M.D., Petoskey (from Military Service)
Philip Clinkston, M.D., Shepherd (from Mt. Pleasant)
C. L. Cook, M.D., Tecumseh (from White Pigeon)
Peter A. McArthur, M.D., Grand Haven (from Ann Arbor)

For information on M.D. Placement, contact Michigan Health Council, 706 N. Washington Street, Lansing, Michigan (Tel. 4-7665).

NATIONAL GASTROENTEROLOGICAL ASSOCIATION

A regional meeting of the Central Region of the National Gastroenterological Association will be held in Milwaukee, Wis., Sunday afternoon, March 28, 1954. The scientific sessions will be held at the Hotel Schroeder at 2:00 P.M., following the semiannual meeting of the Association's National Council.

Participating in the meeting will be Dr. J. Arnold Bargen, Rochester, Minn.; Dr. H. B. Benjamin, Milwaukee,

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Wis.; Dr. Carl W. Eberbach, Milwaukee, Wis.; Dr. James A. Ferguson, Grand Rapids, Mich.; Dr. Robert McCarty, Milwaukee, Wis.; Dr. Karver L. Puestow, Milwaukee, Wis.; Dr. James Smith, Milwaukee, Wis.; Dr. Gerhard Strauss, Milwaukee, Wis.; Dr. Philip Thorek, Chicago, Ill., and Dr. Marvin Wagner, Milwaukee, Wis.

Dr. Sigurd W. Johnsen, Passaic, N. J., President, and Dr. Lynn A. Ferguson, Grand Rapids, Mich., President-elect of the National Gastroenterological Association, will preside at the sessions. Dr. Michael W. Shutkin and Dr. Joseph Shaiken, both of Milwaukee, are the Chairmen of the Program and General Arrangements Committees, respectively.

The Central Region is comprised of the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

Members of the medical profession are cordially invited to attend. A copy of the program may be obtained by writing to Dr. Joseph Shaiken, 536 West Wisconsin Ave., Milwaukee 3, Wis., or to the Secretary, National Gastroenterological Association, 33 West 60th Street, New York 23, N. Y.

INTERNATIONAL POLIOMYELITIS CONGRESS

The Third International Poliomyelitis Conference will be held September 6-10, 1954, at the University of Rome, Orthopedic Clinic, Rome, Italy. The Second International Poliomyelitis Conference, sponsored by the National Foundation for Infantile Paralysis and the Danish National Association for Infantile Paralysis, was held in Copenhagen, Denmark, in September, 1951, with representatives of some 38 nations attending.

The Rome meetings are being sponsored jointly by the University of Rome (Italy), the High Commissionary of Hygiene and Health (Italy), the National Council of Research (Italy), the National Foundation for Maternity and Child Care (Italy) and the National Foundation for Infantile Paralysis (USA).

Requests for hotel accommodations and other Conference information are available from the Secretariate of the Third International Poliomyelitis Conference, 6 via Lucullo, Rome, Italy. Cable address: inpolio, Rome.

WAYNE UNIVERSITY COLLEGE OF MEDICINE

Annual Clinic Day Program

Wednesday, May 12, 1954

Hotel Fort Shelby—Detroit, Michigan

Several outstanding speakers have been provided for the annual clinic day program of Wayne University College of Medicine. The topics to be presented are of wide general current interest and will provide a most rewarding day. The final arrangements have not been completed, but the program as of this writing is as follows:

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$10,000 accidental death Quarterly $16.00 **$50 weekly indemnity, accident and sickness**	**$20,000 accidental death Quarterly $32.00** **$100 weekly indemnity, accident and sickness**

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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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"The Role of Electrolyte Solutions in the Treatment of Surgical Shock"
CARL A. MOYER, M.D., Professor of Surgery
Washington University, St. Louis, Missouri.

"Cardiac Arrest"—Motion Picture
EGBERT H. FELL, M.D., Clinical Professor of Surgery,
University of Illinois, College of Medicine

"Prolonged Labor"
WILLIAM J. DIECKMAN, M.D., Professor and Chairman
Department of Obstetrics and Gynecology
University of Chicago, College of Medicine

"Clinical and Pathological Manifestions of Certain Occupational Diseases—Smoking"
ARTHUR J. VORWALT, M.D., Director, Saranac Laboratory
Path-Trudeau Hospital, Saranac Lake, New York.

"Pelvic Endometriosis"
GEORGE H. GARDNER, M.D., Professor and Chairman
Department of Obstetrics and Gynecology
Northwestern University, College of Medicine
Chicago, Illinois.

A reception in the evening will be followed by the annual banquet which will honor the class of 1904.

Reunions will be held for the classes of 1909, 1914, 1919, 1924, 1929, 1934, 1944 and 1949.

BLUE SHIELD AND ANCILLARY SERVICES

The problem of who shall pay for services rendered to Blue Cross-Blue Shield patients has again come to prominence. The two organizations have each sponsored national insurance groups to administer the uneven services demanded by national subscribers for their employes in scattered areas. The agency representing hospitals, Health Service, Inc., made a contract with a national meat packing company covering in the contract, by advice and demand of an insurance consultant employed by the packing company, x-ray, anesthetic and pathological care. Under the working agreement each national insurance, Health Service, Inc. and Medical Indemnity of America, reinsures the other. Therefore, without any part in the negotiations the Blue Shield was involved in a contract listing the services of these doctors of medicine as a hospital charge.

All the Blue Shield plans have been coping with this problem for years. The AMA in its last few hours of the Interim Session in St. Louis in December, 1953, passed a censuring resolution restating its recognition of roentgenologists, anesthesiologists, pathologists and psychiatrists as doctors of medicine, and demanding such recognition in the non-profit voluntary insurance plans.

A special session of the National Blue Shield Commission, and delegates from all of the plans was called for Chicago, January 16 and 17, 1954. Trustees and Board members were invited. Over 220 persons were registered. Everyone recognized the problem involved, but much tact was needed including a reference committee working until 5:30 Sunday morning. Many minor points were acted upon, but the most controversial problem was resolved as follows:

"It is the feeling of this committee, in common with the American Medical Association, that these (anesthesiology, radiology, pathology, and psychiatry) are an

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integral part of the practice of Medicine. However, in order to accomplish the result, it is necessary to reach an understanding with Health Service regarding the responsible underwriting body for these services. We therefore offer this substitute resolution:

WHEREAS, it is considered that there must be a sharp division between what constitutes medical service and what constitutes hospital service;

THEREFORE, BE IT RESOLVED THAT

1. Blue Shield Medical Care Plans hereby affirm the definitions of the practice of medicine and of medical services as set forth in the official actions of the House of Delegates of the American Medical Association, and
2. Medical Indemnity of America, Inc., contracts be consistent with these actions.

BE IT FURTHER RESOLVED that this resolution be transmitted to the Board of Directors of Medical Indemnity of America, Inc., with the urgent request that its provisions be carried out to the extent possible and negotiations be undertaken with Health Service, Inc., to achieve the desired results."

Michigan Medical Service has recognized this condition since its inception, and has directed payment to doctors of medicine in every instance where they submit a bill and report of services. Eighty-three of our radiologists and all but one of our pathologists have requested in writing that payment be made direct to the hospitals. The spirit is willing.



THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

A PRIMER OF CARDIOLOGY. By George E. Burch, M.D., F.A.C.P., Henderson Professor of Medicine, Tulane University School of Medicine; Physician-in-Chief, Charity Hospital; Consultant in Cardiovascular Diseases. Ochsner Clinic; Visiting Physician, Touro; Infirmary, New Orleans. Second edition, thoroughly revised. 214 illustrations. Philadelphia: Lee & Febiger, 1953. Price $5.50.

The entire text of the second edition has been revised and brought up to date. The method of presentation has not been altered and numerous new illustrations have been added. It is concise and easily readable. As might be expected in such a brief presentation of a large subject, there are many instances where one might wish for more completeness.

This book obviously has not been written for the well-trained cardiologist, but is intended more for the student and the general practitioner who is interested in an introduction of cardiology. In simple terms, Dr. Burch gives a clear approach to the diagnosis of heart disease and to a clinical cardiac evaluation. The various types of heart disease are discussed, emphasizing the correlation of basic physiologic concepts with clinical cardiac conditions.

The appendix gives the nomenclature and classification of heart disease as advanced by the New York and American Heart Associations. This is followed by a table of the relation of cardiac measurements to body size. It also gives a review of diets employed in cardiac disease. This is an excellent primer and can be highly recommended. The book is of a handy size, 322 pages in length; the paper is good and the type face is clear.

L.E.V.

* * *

HYPERSPLENISM AND SURGERY OF THE SPLEEN. By William Dameshek, M.D., and C. Stuart Welch, M.D., Pratt Diagnostic Hospital, New England Center Hospital and Tufts College Medical School, Boston, Massachusetts. Based on exhibits presented at the annual meetings in 1947 and 1951 of the American Medical Association, recipients in 1951 of the AMA Silver Medal. New York: Grune & Stratton, Inc., 1953. Price $10.00.

This excellent study of the "organ of mystery" is a series of monographs and drawings outlining the anatomy of the spleen with an illustration of its relation to other organs.

One is taken into the realm of splenic relations to the endocrine system and bone marrow. This progresses into the interesting study of splenic hormones. Then follows



the study of Hypersplenism—being defined as "exaggerated (humoral) splenic functions with selective or total reduction of red cells, leukocytes and platelets (cytopenias)."

Splenomegaly with cytopenias, hypersplenic syndromes, splenic neutropenia (Felty's syndrome) and splenic pancytopenia are briefly but thoroughly covered, with symptoms, signs and laboratory findings so descriptive that one wonders why this material has not been presented in this form previously.

A description of the results in a series of authors' cases without a fatality follows. All these cases without splenectomy would have resulted in a slow downhill course, whereas, as a result of surgery, 80 per cent were cured.

Pathogenesis of hypersplenic syndromes with theories and the author's concepts proves very interesting. Facts and fancies with relation of the spleen and hemolytic anemia is described in detail followed by an admonition that hemolytic anemia is not always a splenic disorder.

A chapter on causes of splenomegaly, discoursing on palpation, percussion, x-ray visualization with a reference to short cuts in the diagnosis of splenomegaly is exceedingly helpful, ending in indications and counterindications for splenectomy.

From here on, the authors go into preparation of the patient for surgery with blood examination and anesthesia briefed, followed by operative technique, step by step, with colored plates of the operation as well as of the gross specimens which are so excellent one is reminded of the employment of three dimension.

In the final analysis, this is the best individual treatise on the spleen, its diagnosis and treatment, that has been the pleasure of this reviewer to read.

The silver medal awarded by the American Medical Association is well merited by the authors. This volume is most highly recommended for every medical practitioner.

W.A.H.

PATHOLOGY. Edited by W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology and Chairman of the Department of Pathology, University of Miami School of Medicine; Director of the Pathology Laboratories Jackson Memorial Hospital, Miami, Florida; formerly Professor of Pathology, Marquette University School of Medicine, Milwaukee. With 1,241 illustrations and 10 color plates. Second edition. St. Louis: The C. V. Mosby Company, 1953. Price $16.00.

The reviewer is forced to agree with the statement made by the author in the preface that only minor changes have been made since the previous edition, but the reviewer likewise hastens to agree, with the consensus, that this volume is an outstanding contribution to pathology. Chapters that are particularly excellent include one describing the pathological changes following injuries from physical agents. This section, written by Dr. Moritz, consists of matters usually questionably omitted from practically all general texts in pathology. An





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extraordinary number of pages are also devoted to the pathology of the endocrine system, particularly the pituitary. This not only reflects the great advances made in this particular phase of medical science, but page for page, illustrates the relative inadequacy of recent books on pathology. The section on the central nervous system indulges in basic anatomical and embryological principles as an introduction to this excellently written and illustrated chapter. This is a particularly condensed and commendable portion.

The basic explanation of pathologic concepts and principles is definitely abbreviated in the early chapters but due to the fact that much of this material has not altered appreciably for some three decades, it is undoubtedly, a wise decision. This may make it slightly less valuable for the student but of far greater importance as a reference work to the medical graduate in almost any field. Many new illustrations are present in this edition and are uniformly good. A mild criticism of this phase of the work is the lack of diagrams and tables, which in some instances, would have saved space and would have been useful. The paucity of colored plates in certain chapters, in contrast to the earlier books on pathology is regrettable but can undoubtedly, be attributed to the present economy. The chapter on disturbances of the circulation, which is not quite on a par with the remainder of the text, could have conceivably been incorporated in the chapters of the blood and lymphatic vessels. It is always of interest to note that in these endeavors, where the sections are written by various authors, that there is some overlap and some difference of opinion which in most instances could be considered meritorious. Certain sections apparently have suffered somewhat by condensation, an example being that one dealing with the breast.

This volume must be considered not only as a general text on pathology, which is second to none of its contemporaries, but also as a comprehensive reference work, not alone by virtue of the broad scope of its text, but by the rather complete bibliography following the chapters.

A.A.H.

ANATOMY AND SURGERY OF HERNIA. By Leo M. Zimmerman, M.D., Professor of Surgery and Co-Chairman of the Department of Surgery, Chicago Medical School; Attending Surgeon, Michael Reese, Cook County and Chicago Memorial Hospitals, and Barry J. Anson, Ph.D. (Med. Sc.) Professor of Anatomy, Northwestern University Medical School; Member of Attending Staff, Passavant Memorial Hospital. Baltimore: Williams & Wilkins Company, 1953. Price $10.00.

This new monograph on every type of abdominal hernia, combines the excellent anatomical studies of Anson over the years and the surgical writings of Zimmerman who stresses the theme, "the treatment of hernia is early surgical repair." There is an introductory chapter on hernia in general, which develops Doctor Zimmerman's important view that the surgeon must vary his technique as the situation demands, and should not make the hernia fit one or two standard routine techniques. This

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is followed by studies of the anatomy of the abdominal wall, with profuse illustrations to show the many variations which occur.

In the following chapters, every type of hernia is discussed in detail with a review of the anatomy encountered in the region, the anatomy which is distorted by the hernia. Various operative techniques are presented in addition to the author's preference. There is a generous bibliography at the conclusion of each chapter.

This book shows the futility of using a truss, with a few rare exceptions, and points out the harm done by wearing a truss. The less common diaphragmatic, internal and pelvic hernias are discussed, with current concepts of diagnosis and treatment. The final section is a timely discussion on medicolegal aspects of inguinal hernia. Every general or industrial surgeon would do well to have this volume in his library.

S.B.W.

THE DIGESTIVE TRACT IN ROENTGENOLOGY. By Jacob Buckstein, M.D., Assistant Professor of Clinical Medicine, Cornell University Medical College; Visiting Roentgenologist (Alimentary Tract Division), Bellevue Hospital, New York City; Attending Gastroenterologist, Beth David Hospital, New York City; Consultant to the Central Islip State Hospital, New York; Norwalk General Hospital, Norwalk, Connecticut; Good Samaritan Hospital, Suffern, New York; Formerly Consultant in Gastroenterology to the U. S. Public Health Service and the United States Veteran's Bureau. Second edition. Two volumes. 1,534 illustrations in 897 figures. Philadelphia, London, Montreal: J. B. Lippincott Company, 1953. Price $30.00.

The second edition of Buckstein's work carries forward the excellent example set forth in the first edition. The book is very well arranged, easy to read, and with the pages divided into two columns, one covers ground rapidly.

The scope of the books is all inclusive. Each phase of the gastrointestinal tract is well covered in the text, by the use of plates, and by the citing of illustrative cases. The index is more than ample, and makes all of the material readily accessible.

The author and the publishers are to be congratulated on the contents and the format. This work rivals some of the better books previously associated with "English Publications."

G.T.P.

FINANCING HOSPITAL CARE IN THE UNITED STATES. Reports of the Commission on Financing of Hospital Care. These volumes will be published by The Blakiston Company, Inc., New York, in the spring and summer of 1954.

FROM THE WORKSHOP OF DISCOVERIES. By Otto Loewi, Research Professor of Pharmacology, New York University College of Medicine. Porter Lectures, Series 19. Lawrence, Kansas: University of Kansas Press, 1953.

This book is small, founded on the materials of a lecture, and is full of comments. It is challenging in what it questions. The reviewer is reminded of his daughter asking what subject to take in her senior year

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to fill out a very short required time. He suggested Professor X, who teaches Astronomy. She was not interested in astronomy and questioned why? He replied that her education would not be complete without the stimulation of such a master mind, no matter what the title of the course. She enjoyed it more than any course, but learned no astronomy. Read the book for the author.

HANDBOOK OF DIFFERENTIAL DIAGNOSIS. By Harold Thomas Hyman, M.D., author of an Integrated Practice of Medicine. Philadelphia: J. B. Lippincott Co., Price, $6.75.

In its over seven hundred pages, the author has devised a concise and systematized text to be used for quick and ready reference by the busy practitioner, the specialist retaining broad interests in clinical medicine, students, interns and residents. It is not intended to be a substitute for the standard texts but to be used at the bedside or in the office.

An index listing 1,585 symptoms and signs which further refers the reader to one of 232 divisions of differential diagnosis, alphabetically arranged, begins the text. The divisions are composed of: an "introduction" of background material, "sideheadings" of causative mechanisms subgrouped according to "etiology" (allergic, metabolic, infectious, etc.) or "predominant system response" (circulatory, digestive, respiratory, etc.): further subgrouping into component "diagnostic entities," and finally a concise description of each syn-

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drome together with indicated Therapeutic Tests and suggestions.

The author is to be commended for bringing together the more often encountered medical entities in such an accurate and reliable manner. In his preface, he states that "a compendium in the hand is worth many monographs in a remote library" and he has compiled a text "of small bulk but of large value in daily clinical practice."

G.W.S.

FAREWELL TO THE COMMON COLD. An exposition of the Body Heat Theory of Dr. Max Rubner. By Horace Markley. The Exposition Press, Inc., 386 4th St., New York 16, N. Y.

The author of this book is a farmer, eighty-five years of age, who has read an immense amount of scientific works, judging from the list given as substantiating his remarks. He read a book by Dr. Max Rubner, The Chemical and Physiological Regulation of the Thermal Temperature of the Body. The remedy he recommends is a long restful hot soaking bath. The reader is warned not to wipe, but to get into night clothes moist and tuck into bed snugly, with a hot water bag or heating pad. "For the restoration of vitality, the heat and energy of which the body has been robbed—thus causing the common cold—there is nothing in the Pharmacopeia that can equal this simple formula in its safety and its surety." It has taken 236 pages to say what the reviewer's wife says in a dozen words. But it is amusing reading.

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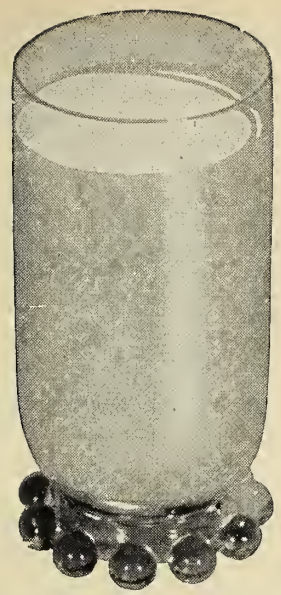
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Just following my graduation and location in a small village in Hillsdale County, Michigan, I had read of of a young doctor who had lost his first mother in confinement from hemorrhage.

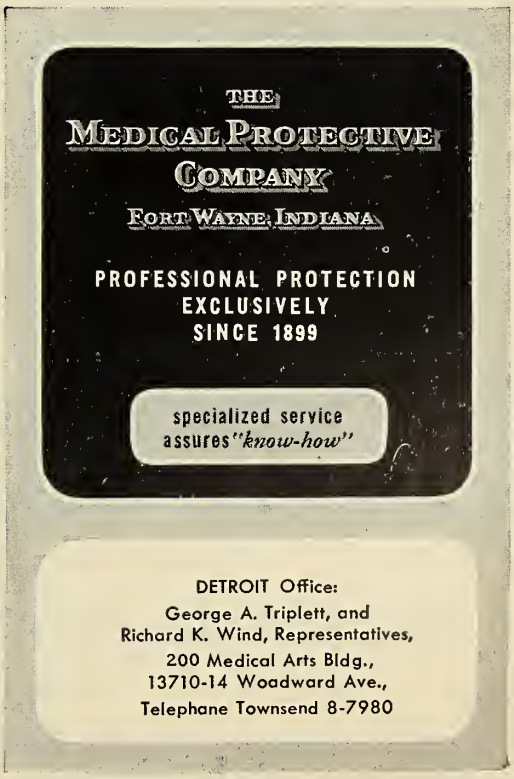
I felt terribly sorry for him and hoped nothing of that sort would ever happen to me. Yet, I was not alert to the possible dangers always attending such cases.

I was on my first confinement case. It was a first baby, too. The patient's mother, acting as mid-wife, was assisting me in the care of her daughter. The baby was born without serious difficulty. The new grandma and I were admiring it, when I was shocked by hearing the patient say, "My, everything is getting so dark here," I could hear her life flooding away with a hissing sound, and in desperation struck her across the bare abdomen with the open hand a blow heard about the house. That shock stopped the hemorrhage and saved the patient, and I'm happy to say she is now a grandmother still living and the baby born on that occasion is also now a grandmother.

That was my first and last experience of the kind, and I have often wondered if others have saved patients by such a crude method.

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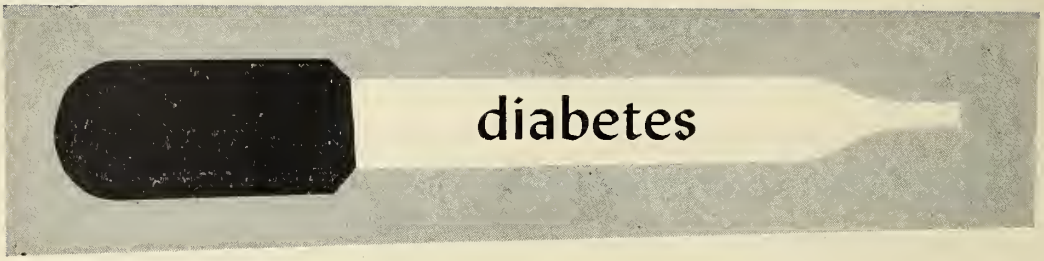
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1. Blotner, H., and Marble, A.: New England J. Med. *245*:567 (Oct. 11) 1951.
2. Steine, L.: GP *8*:45 (July) 1953.

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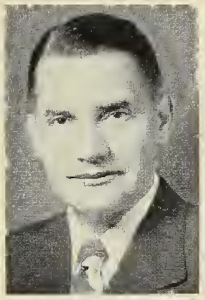
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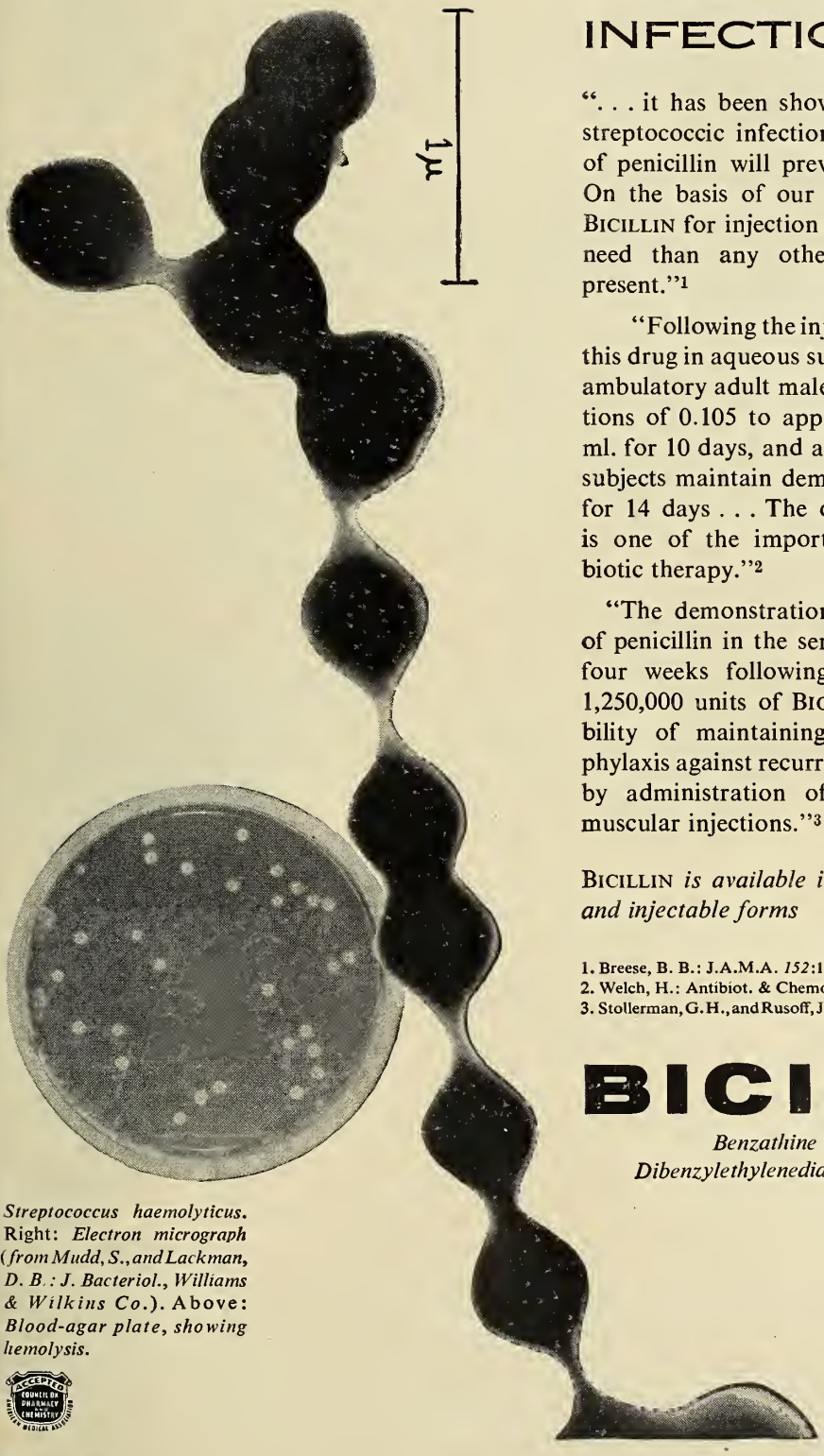
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SUSTAINED PENICILLIN LEVELS IN STREPTOCOCCAL INFECTIONS



Streptococcus haemolyticus. Right: *Electron micrograph (from Mudd, S., and Lackman, D. B.: J. Bacteriol., Williams & Wilkins Co.).* Above: *Blood-agar plate, showing hemolysis.*

"... it has been shown that the treatment of streptococcic infections by adequate amounts of penicillin will prevent rheumatic fever ... On the basis of our experience, we feel that BICILLIN for injection more nearly supplies the need than any other product available at present."[1]

"Following the injection of 600,000 units of this drug in aqueous suspension, 100 per cent of ambulatory adult males show blood concentrations of 0.105 to approximately 0.03 unit per ml. for 10 days, and about 50 per cent of these subjects maintain demonstrable concentrations for 14 days ... The development of BICILLIN is one of the important milestones in antibiotic therapy."[2]

"The demonstration of detectable amounts of penicillin in the serum of most patients for four weeks following the administration of 1,250,000 units of BICILLIN suggests the feasibility of maintaining continuous drug prophylaxis against recurrences [of rheumatic fever] by administration of single monthly intramuscular injections."[3]

BICILLIN *is available in oral suspension, tablet, and injectable forms*

1. Breese, B. B.: J.A.M.A. *152*:10 (May 2) 1953
2. Welch, H.: Antibiot. & Chemo. *3*:347 (April) 1953
3. Stollerman, G. H., and Rusoff, J. H.: J.A.M.A. *150*:1571 (Dec. 20) 1952

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New ERYTHROCIN Stearate tablets provide excellent drug protection from gastric secretions with the new *Film Seal** marketed only by Abbott—plus a special buffer system. Result: Because the need for an enteric coating is eliminated, the drug is more rapidly absorbed.

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ERYTHROCIN Stearate is highly effective against coccal infections. Especially recommended when the infecting organism is staphylococcus—*because of the high incidence of staphylococci resistant to penicillin and other antibiotics*. Advantageous, too, when patients are allergically sensitive to other antibiotics.

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Pediatric ERYTHROCIN Stearate Oral Suspension. Tasty, stable, ready-mixed.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 18, 1954

- Seventy-eight items were presented to the Executive Committee of The Council at its February 18 meeting. Chief in importance were:
- **AMA request for recommendations** re health activities in Michigan now supported by federal funds. The Executive Committee felt that inasmuch as federal legislation does not arise in the States, that the AMA be requested to list these federal aid laws and then ascertain from the state medical societies which of these laws they may have objections to and which ones work out reasonably well in the States.
- **Committee reports:** The following Committee reports were presented (a) Beaumont Memorial, meeting of January 30; (b) Public Relations, meeting of January 30; (c) Emergency Medical Service, meeting of February 3; the Executive Committee of The Council recommended that all state and county hospitals and institutions be encouraged to stockpile supplies to anticipate disaster; also the Executive Committee placed upon its minutes a vote of thanks and commendation to the members of the Emergency Medical Service Committee and recommended to the JMSMS Editor that a feature story on the excellent work of this Committee be published in an early number of JMSMS; (d) Ubiquitous Hosts for Michigan Clinical Institute, meeting of February 17.
- **Report on the Conference** of Michigan County Medical Societies Executive Secretaries (six) held at the MSMS headquarters on February 10 in Lansing was presented by Executive Director Burns.
- **H. B. Zemmer, M.D., and P. A. Martin, M.D.,** Detroit, were appointed as members of the MSMS Mental Hygiene Committee; Douglas Donald, M.D., and Frank A. Weiser, M.D., Detroit, were appointed as MSMS representatives to the Liaison Committee with the State Bar of Michigan to study phases of malpractice; A. J. Cortopassi, M.D., Saginaw, was appointed to the Subcommittee on Hearing of the Child Welfare Committee; Ralph A. Johnson, M.D., Detroit, was appointed to the Committee on Postgraduate Medical Education for the unexpired term of the late E. D. Spalding, M.D.
- **Official MSMS representatives** to attend the Ohio State Medical Association Annual Meeting in Columbus, April 12-15, 1954, were authorized, in response to O.S.M.A. invitation.
- **H.R. 7341,** the Administration's bill to expand the Hill-Burton program, House of Representatives hearing on same was reported by John R. Rodger, M.D., of Bellaire, who was authorized to attend the Senate hearing in Washington, D. C.
- **County society secretaries** were requested to submit names of all members now being considered for special membership, so that they may not be considered delinquent as of April 1, 1954, according to MSMS By-Laws, Chapter 15, Sec. 2: "Any member in arrears after April 1 of each official year shall stand suspended, etc."
- **MSMS again will offer a speaker** to the component county medical society which sends the highest percentage of attendance to the MSMS Annual Session, Detroit, September, 1954.
- **Invitation of Michigan Medical Service** to hold its luncheon for Members of the Corporation, on Tuesday, September 28, 1954, in its new building on East Jefferson Ave., Detroit, was accepted.
- **MSMS representatives:** William Bromme, M.D., Detroit, and D. R. Smith, M.D., Iron Mountain, were renominated as MSMS representatives to the Board of Michigan Hospital Service; B. M. Harris, M.D., Ypsilanti, and Public Relations Counsel H. W. Brenneman were appointed as MSMS representatives to the Admissions and Budget Committee hearings of United Health and Welfare Fund of Michigan, Inc.
- **Communication from R. W. Spalding, M.D.,** of Gobles, recommending incorporation of the preceptor plan in Michigan's medical schools was referred to the MSMS Committee on Postgraduate Medical Education with suggestion that it investigate the program developed by the University of Wisconsin Medical School.

(Continued on Page 368)

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MCI Roundup



L. J. Hirschman, M.D.

An outstanding scientific program, a group of well-planned related special events, an excellent exhibit, and a three-day preview of spring weather all were factors in building a new attendance record at the 1954 Michigan Clinical Institute, March 10, 11 and 12.

Total registration for the Eighth Annual MCI reached 2,503—almost double the attendance at the first institute in 1947, and 330 greater than the previous record set in 1953. Once again the MCI and all its related events were held in the Sheraton-Cadillac Hotel, Detroit.

As the session closed, it was announced that Louis J. Hirschman, M.D., former MSMS President, had been named Chairman of the Ninth Annual MCI in 1955. Dr. Hirschman, who practiced in Detroit for many years, now resides in Traverse City.

The popular "block system" of conveniently grouping lectures according to subject matter was a drawing card again in 1954.

Most spectacular part of the program was the daily series of live television broadcasts in color, beamed directly to the meeting hall via closed circuit from "studios" in Harper Hospital. The telecasts, projected onto a large screen visible from every part of the auditorium, were the second ever to be presented before a statewide medical meeting. Smith, Kline & French Laboratories of Philadelphia, Pa., sponsored the two-hour programs each afternoon.

In ceremonies scattered through the three-day MCI, nine honorary scrolls were presented; four to Michigan doctors of medicine who currently head national medical organizations, one to "Michigan's Foremost Family Physician for 1953," one to a guest lecturer, one to a Detroit newspaperman, and two to pharmaceutical houses.

William J. Stapleton, M.D., Detroit, chosen last September as "Michigan's Foremost Family Physician for 1953" received his scroll before a crowded auditorium, then was honored at a testimonial luncheon. The ceremony was filmed by WJBK-TV for its newscasts and was given statewide coverage by newspapers and radio stations.

The four Michigan men honored for heading national medical organizations are: Howard P. Doub, M.D., Detroit, President, American College of Radiology; E. W. Schnoor, M.D., Grand Rapids, President, Federation of State Medical Examining Boards; L. W. Shaffer, M.D., Detroit, President, American Venereal Disease Association, and J. M. Sheldon, M.D., Ann Arbor, President, American Academy of Allergy.

Eugene P. Pendergrass, M.D., Philadelphia, who presented the annual R. S. Sykes Lecture, also received a scroll, as did Jack Pickering, *Detroit Times* science writer (see special story in this issue).

For pioneering in the use of two modern media for postgraduate medical education, scrolls were presented to Davis & Geck, Inc., Danbury, Conn., whose library of surgical films in color are an annual MCI feature, and to Smith, Kline & French Laboratories, producers of numerous color television clinics.

News coverage of the 1954 MCI reached a peak, with daily stories in all Detroit newspapers and dailies throughout the state. Greatest play was given to the lecture on poliomyelitis vaccination by Albert E. Sabin, M.D., Cincinnati, Ohio, sponsored by the Michigan Foundation for Medical and Health Education. Dr. Sabin's remarks attracted national attention, including a two-column story in the *New York Times*.

(Continued on Page 356)

Record-Breaking Attendance at 1954 MCI

The record-breaking total registration for the Eighth Annual Michigan Clinical Institute, March 10-11-12, becomes even more impressive when compared closely with the two preceding years. The 1954 total is 220 greater than the record set in 1953, and 550 greater than 1952. However, the 1953 high included some 280 operating room nurses who attended a special MCI conference that year.

Here are the final figures for 1954:

Doctors of Medicine	1,735
Guests (including Senior Medical Students)	404
Exhibitors	364
Grand Total	2,503



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Gail Borden VITAMIN-MINERAL FORTIFIED Milk and Skimmed Milk

The natural food way to insure extra vitamin and mineral protection. One quart of either contains 100% of the minimum adult daily requirements of 9 of the 10 essential vitamins and minerals, by U.S.F.D. & A. standards. Available in *whole* or *skimmed* for varying caloric needs. Both come in protective containers.

Low Calorie Cottage Cheese

A fresh cultured Cottage Cheese with *no cream added* and *no salt added!* An appetizing source of milk's complete proteins, minerals and B vitamins. Small tender curds and sweet, fresh flavor. This low-calorie, high-nutrition food can be used in scores of easy-to-prepare, tasty dishes!

Buttermilk

A farm-type cultured Buttermilk famous for its fine, fresh flavor! Approximately 2% butterfat, in the form of tiny churned flakes of butter. All the protein and mineral low-fat and low-calorie qualifications to recommend it for certain dietary needs.

All Borden's fresh dairy products available on regular home delivery, or at convenient neighborhood stores

Borden's

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Michigan Milk Division
DETROIT, MICHIGAN

(Continued from Page 354)

Radio and television newscasters also followed the MCI with interest.

Behind the successful 1954 Michigan Clinical Institute are a great many hard-working doctors of medicine. Among those who merit special mention are:

Committee on Arrangements and Program.—Wilfrid Haughey, M.D., Battle Creek, Chairman; A. H. Miller, M.D., Gladstone; L. W. Hull, M.D., Detroit; R. J. Hubbell, M.D., Kalamazoo; L. Fernald Foster, M.D., Bay City; H. H. Cummings, M.D., Ann Arbor; J. Milton Robb, M.D., Detroit; John Alexander, M.D., Ann Arbor; Fred A. Coller, M.D., Ann Arbor; F. Bruce Fralick, M.D., Ann Arbor; J. M. Sheldon, M.D., Ann, Arbor; H. A. Towsley, M.D., Ann Arbor; E. H. Fenton, M.D., Detroit; G. C. Penberthy, M.D., Detroit; W. S. Reveno, M.D., Detroit; W. J. Butler, M.D., St. Joseph; K. L. Crawford, M.D., Kalamazoo; R. E. Fisher, M.D., Bay City; D. A. Koch, M.D., Port Huron; R. W. Pomeroy, M.D., Lansing; F. H. Power, M.D., Traverse City; D. S. Smith, M.D., Pontiac; W. H. Steffensen, M.D., Grand Rapids; A. E. Heustis, M.D., Lansing; V. N. Slee, M.D., Hastings; E. I. Carr, M.D., Lansing and W. B. Cooksey, M.D., Detroit.

Ubiquitous Hosts.—Z. S. Bohn, M.D., Detroit; W. B. Cooksey, M.D., Detroit; M. A. Darling, M.D., Detroit; Leon DeVel, MD., Grand Rapids; P. J. Howard, M.D., Detroit; H. A. Howes, M.D., Detroit; E. R. Sherrin, M.D., Detroit; N. M. Taylor, M.D., Grosse Pointe; G. C. Thosteson, M.D., Detroit and E. A. Wishropp, M.D., Grosse Pointe.

Chairmen of Assemblies.—V. C. Abbott, M.D., Pontiac; D. A. Koch, M.D., Port Huron; G. C. Penberthy, M.D., Detroit; J. M. Sheldon, M.D., Ann Arbor; W. H. Steffensen, M.D., Grand Rapids, and Frank Van Schoick, M.D., Jackson.

Discussion Conference Leaders.—F. A. Coller, M.D., Ann Arbor; W. S. Reveno, M.D., Detroit, and K. W. Toothaker, M.D., Lansing.

Press Relations Committee.—C. L. Weston, M.D., Owosso, Chairman; H. F. Dibble, M.D., Detroit; A. B. Gwinn, M.D., Hastings, and R. A. Johnson, M.D., Detroit.

Among the non-medical personnel contributing to the success of the 1954 MCI were F. M. Shuster, Birmingham, and R. A. Aubrey, Detroit, who were loaned by E. I. du Pont de Nemours & Co., Inc., to augment the executive staff, and the staff members loaned by Provident Life & Accident Insurance Co., Chattanooga, Tenn., and Marsh & McLennan, Detroit, to man the MSMS scientific exhibit.

Members of the working press deserving mention for on-the-spot coverage of MCI events include Jean H. Pearson and Charles Manos, *Detroit Free Press;* Merle Oliver, *Detroit News;* Jack Pickering, *Detroit Times;* Foster Hailey, *New York Times;* Murray Young, WJBK-TV; Fenton Ludtke, Associated Press; Alan W. Klein, United Press, and Joseph R. Hainline, WJR. Many other press and radio representatives took part in advance planning.

Thanks are also extended to the Michigan Medical Service for the "Doodle Diaries" distributed to registrants.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954

Spring	MSMS Postgraduate Extramural Courses	State-wide
May 6	Ingham County Medical Society Clinic Day	Lansing
May 11	Dedication of new Wayne University Medical College Building	Detroit
May 11	Testimonial Dinner honoring William J. Stapleton, Jr., M.D. sponsored by Wayne University College of Medicine Alumni Association, Wayne County Medical Society, and Michigan State Medical Society	Sheraton-Cadillac Hotel, Detroit
May 12	Annual Clinic Day and Alumni Reunion, Wayne University College of Medicine (testimonial to Michigan's Foremost Family Physician, Wm. J. Stapleton, Jr., M.D.)	Hotel Fort Shelby, Detroit
May 20	American College of Surgeons Annual Symposium on Trauma and Nutrition	Ann Arbor
June 8	Bon Secours Hospital Annual Clinic Day	Detroit
June 18	Annual Clinic Day, St. Clair County Medical Society	St. Clair Inn, St. Clair
June 18-19	Upper Peninsula Medical Society Annual Meeting	Menominee
June 21-25	AMA Annual Session	San Francisco
July 17	Beaumont Memorial Dedication	Mackinac Island
July 29-30	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
Sept. 29-30 thru Oct. 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
November 3	Clara Elizabeth Fund Lectures, Genesse County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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Fully evaluated clinically

...and known as an agent of choice in the treatment of infections caused by gram-positive and gram-negative pathogens, spirochetes, rickettsiae, certain large viruses and protozoa.

True broad-spectrum action

"Terramycin appears to have [a] most widespread effective range...."[1]

Rapidly absorbed

"Terramycin administered orally was absorbed rapidly with the appearance of antibacterial activity in the serum within 1 hour of administration."[2]

Promptly effective

Many "patients...improved rapidly"[3] with return of temperature to normal often noted within twenty-four hours.

Well tolerated

"Terramycin is generally well tolerated...."[4]

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1. Cowart, E. C., Jr.: Mississippi Doctor 29:278 (April) 1952.
2. Sayer, R. J., et al.: Am. J. M Sc. 221:256 (March) 1951.
3. Knight, V.: New York State J. Med. 50:2173 (Sept. 15) 1950.
4. Trafton, H. M., and Lind, H. E.: J. Urol. 69:315 (Feb.) 1953.

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Jack Pickering---A Tribute



When the Michigan State Medical Society honored Jack Pickering for his reporting of medical problems it came as no surprise to Pickering's colleagues in the *Detroit Times* city room.

Pickering's fellow workers are so impressed by his medical erudition that he is usually the first to hear of any new ache or pain plaguing a fellow reporter, a profession that has its share of hypochrondriacs. In fact the corner of the city room where Pickering sits has been referred to as Doc Pickering's Clinic, in recognition of the ailing journalists who gather there to discuss their latest symptoms.

But before the MSMS gets an indictment against Pickering for practicing without a license, it should be hastily pointed out that Pickering dispenses only a good "bedside manner" and a very sound bit of advice: "See your Doc."

As a matter of fact, this latter counsel has probably prolonged a number of journalistic lives. Instead of just fretting about ailments, real or imaginary, a number of Pickering's fellow workers have gone to specialists of his recommendation—once or twice just in time.

But Pickering's real service, of course, has been taking the mystery away from the medical profession in the eyes of the general public. He puts it simply:

"Most criticism of the medical profession is the outgrowth of public ignorance. When people don't understand a profession they are apt to seriously misunderstand it and criticize unjustly.

"The Michigan State Medical Society has pioneered in letting the public know what medicine is really all about.

"With this new understanding has come an appreciation of what the medical profession actually has accomplished. Equally beneficial has been the growing public realization of the obstacles doctors face.

"People now realize that a hitherto incurable disease will not be conquered in a single year. In the past, unfortunately, many of the most articulate 'spokesmen' have been unscrupulous quacks.

"Editors used to be skeptical of new discoveries in medicine because they had been fooled so many times by phoney cures announced by this maverick fringe."

Pickering, a lanky easy-going character forty-four years old, is the first to disclaim the role of savant. In fact, he confesses that after witnessing dozens of operations his stomach still does flip-flops and the operating room starts to whirl on occasion.

He says: "If I can get past the initial incision I'm usually all right. After that the operation becomes a news story and a scientific problem. But I brace myself when the surgeon takes that first cut."

Pickering hung out his shingle after fifteen years in which he held down about every type of newspaper job, following his graduation from the University of Michigan in 1932.

During his first years in the business the paper that employed Pickering (not the *Times*) seemed determined that he should not exercise his flair for meeting people and extracting news from them. He was an assistant state editor, a copy reader and a rewrite man. In fact it was a technical demotion when he finally got his wish and was put "on the street" as a reporter.

However, Pickering was in the very first flight of Detroit reporters when he joined the *Times* in 1940.

When World War II military service interrupted Pickering's career he was adamant in insisting he did not want to be "stuck on some camp paper writing stuff that would please the colonel."

The Army took him at his word. For a year Pick was a heavy weapons instructor at Fort McClellan, La., initiating a succession of recruits into the mysteries of machine guns and mortars.

However, even the Army could not separate Pick from a typewriter indefinitely and he was on the Pacific edition of the "Stars and Stripes" when the shooting stopped.

Pickering's father and an older brother probably deserve an assist for the scroll he was recently awarded by the MSMS for his medical writings. Pickering's father was an analytical chemist and the brother is an M.I.T. graduate and an engineer. They early realized it was hopeless to talk Pickering out of newspaper work (then a dismally underpaid profession) but they did give him a background of scientific curiosity.

"My father was always disgusted at sensational, pseudo-scientific stories," Pickering recalls. "He contended, and I agree, that the truth is even more absorbing if properly presented."

Pickering, besides his specialty, is still an all-round reporter. One of his biggest exclusives was the tip several years ago that led to discovery of dynamite that had been stored in the UAW building with a view to blowing the union leaders beyond the aid of the most skilled medical attention.

—E. A. Batchelor, Jr.



Which filter-tip cigarette is the most effective?

tinuing and repeated impartial ic tests, smoke from the new consistently proves to have much cotine and tar than smoke from ner filter cigarette—old or new. reason is KENT's exclusive Mi- Filter.

new filter is made of a filtering al so efficient it has been used to the air in atomic energy plants roscopic impurities.

pted for use as a cigarette filter, it removes nicotine and tar particles as small as 2/10 of a micron.

And yet KENT's Micronite Filter, which removes a greater percentage of nicotine and tar than any other filter cigarette, lets through the full flavor of KENT's fine tobaccos.

Because so much evidence indicates KENT is the most effective filter-tip cigarette, shouldn't it be the choice of those who want the minimum of nicotine and tar in their cigarette smoke?



Kent with the exclusive Micronite Filter

"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

PR REPORT



GEO. N. PETROFF, M.D.

TIME AND AGAIN, it has been noted that the medical profession as a whole has made some of its greatest gains public relations-wise through the community service rendered by a single doctor of medicine. All too often individual effort continues for years without public recognition, but not so in the case of George N. Petroff, M.D., thirty-six-year-old Pontiac community leader, who last month was named Michigan's Outstanding Young man of 1953, by the Michigan Junior Chamber of Commerce.

Dr. Petroff was selected for the annual Jaycee award in recognition of the vital part he has played in a great many Pontiac civic activities during the years when he was busy establishing and maintaining a wide practice.

During the year 1953, Dr. Petroff served on the boards of directors of the Pontiac Kiwanis Club, the Pontiac Chamber of Commerce and the Pontiac Boys Club. In addition he served as chairman of the professional division in the local United Fund Campaign, and was active in the New Hospital Committee, the Parent-Teachers Association and Boy Scout work. He initiated a drive in his own community to raise funds for the victims of the Flint tornado, and headed various Jaycee activities.

The Boys Club of Pontiac also honored him by naming him "Father of the Year."

His practice included the position as athletic physician for both St. Michaels and Pontiac high schools.

Dr. Petroff serves on the staff of Pontiac General and St. Joseph Mercy hospitals, and during the year worked on three committees of the Oakland County Medical Society. He is a graduate of the Wayne University College of Medicine. During World War II he served as a medical officer in the European Theater and now holds a commission as Captain in the Medical Corps Active Reserve.

The Jaycee citation declared that "Dr. Petroff's professional work during 1953 met the highest standards of the medical profession" and concluded that "his pleasing personality, dynamic leadership, boundless energy and insatiable desire to better the community in which he lives is an inspiration to us all."

Such statewide recognition of Dr. Petroff's community-building efforts reflects favorably upon every member of his profession in Michigan. So often it is true that the most valuable PR activity is no more than plain good citizenship.

* * *

MOST SUCCESSFUL PR vehicle for several local medical societies during the past few months has been the public forums carried on in several Michigan communities, usually with co-operation from other organizations. Wayne County Medical Society, backed by the *Free Press* and later WXYZ, led the way with an outstanding series last fall. This was followed by excellent series in Grand Rapids, Kalamazoo and Ann Arbor. Modifications of the panel-type forums were carried on by county medical societies in Bay City and Jackson, in conjunction with the adult education program of the school system.

The Grand Rapids forum series, sponsored by the Kent County Medical Society in co-operation with the Kiwanis Club and the *Grand Rapids Press,* drew crowds rivaling those in Detroit. Interest was proportionately high in Ann Arbor, where the Kiwanis Club and *Ann Arbor News* joined with the Washtenaw County Medical Society and the University of Michigan Medical School, and in Kalamazoo, where the Rotary Club and Kalamazoo Academy of Medicine, teamed up to present straight medical facts.

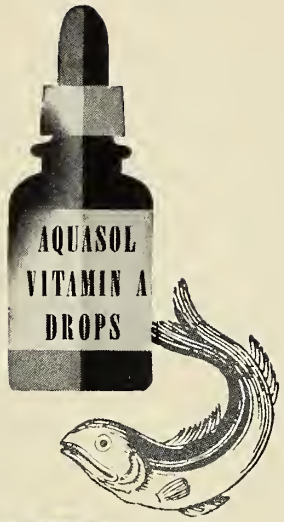
In each case, the forum has helped bring about better understanding of the medical profession and the need for continued medical freedom, at the same time placing before the community some frank and authoritative discussions on current health problems and medical progress. Favorable editorial comment and public goodwill have been engendered in every instance.

The PR Department of MSMS has gathered a file of information on planning and promoting medical forums, based on the successful experience in Michigan communities, to be offered as a future guide for local societies.

MEDICAL INDEBTEDNESS

A survey completed for the Federal Reserve Board last year reports: Of about 53,000,000 families in the United States, almost 43,000,000, over 80 per cent, reported no medical debts whatsoever. One million families owed from $200 to $1,000, while another 200,000 owed more than $1,000. Nine million owed from $1.00 to $200. About 3 per cent of the families really needed help to pay their medical bills.—WALTER B. MARTIN, President-Elect AMA

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THE **FIRST** AND **ORIGINAL** ACCEPTED BY THE COUNCIL

AQUASOL VITAMIN A DROPS

Aquasol Vitamin A Drops provides 50,000 U. S. P. units of natural vitamin A per gram in aqueous solution.

Aqueous solutions of vitamin A . . . as available in Aquasol Vitamin A Drops . . . are more rapidly absorbed than vitamin A in oil solutions. [1-8]

It is suggested in patients with dysfunctions of the liver, pancreas, and biliary tract which interfere with utilization of fats; in celiac disease and certain other diarrheal states. [1,4,8]

The Research Laboratories of U. S. Vitamin Corporation in 1943 pioneered and developed the making of aqueous solutions of lipo-soluble vitamins . . . now protected by U. S. Patent No. 2,417,299.

Samples available upon request.

u. s. vitamin corporation

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250 E. 43rd St., New York 17, N. Y.

1. Lewis, J. M., et al.: Jl. Pediatrics 31:496, 1947
2. Kramer, B., et al.: Am. Jl. Dis. Child. 73:543, 1947
3. Halpern, G. R., et al.: Science 106:40, 1947
4. Nutrition Reviews 5:286, 1947
5. Clifford, S. H. and Weller, K. H.: Pediatrics 1:505, 1948
6. Popper, H., et al.: Gastroenterology 10:987, 1948
7. Davidson, D. M., et al.: Jl. Invest. Derm. 12:221, 1949
8. Nutrition Reviews 6:248, 1948

Cancer Comment

CONTROL OF QUACKERY

Heartening news regarding the control of quackery in cancer treatment recently has come out of California. The California Medical Association has requested its nine-man Cancer Commission to investigate all questionable methods proposed for the diagnosis and treatment of cancer in that state.

The Commission was also authorized to recommend disciplinary action against any CMA member who persisted in the use of methods or materials found to be of no value in the treatment of cancer. Such members would be subject to censure, suspension, or expulsion from their medical groups, as the findings of their use of these useless materials warranted.

In March, 1953, the Cancer Commission issued a report condemning "Laetrile" a non-toxic drug that "is valueless as a cancer cure and is a waste of the patient's time and money." As is the usual plan, the physicians using this drug charged from $50 to $100 per 100 milligram injection. The chief ingredient of this material was found to be amygdalin, "a natural product obtained from apricot pits. It is readily available at a cost of less than two cents per 100 milligrams," according to the Cancer Commission's report.

Another alleged "cancer cure" called "arginase" has more recently been exposed by this same Cancer Commission. "Arginase is a naturally occurring chemical found in the liver and in other tissues." The greatest use of this drug was found in one Southern California hospital where 120 cancer patients were treated in a two-year period. Five months later, 70 of these patients were dead of cancer. "In a particular study of 26 cancer patients under this treatment, six had died of their disease, and none of the others had shown objective evidence of control of cancer under treatment with arginase alone." Autopsy studies on the dead patients "disclosed no evidence of specific chemotherapeutic effect," reported the Cancer Commission.

These two California reports closely follow the results of similar investigations elsewhere. While reading these and similar reports, one is constantly asking why physicians who have honestly earned their medical degree will continue to be drawn into such nefarious schemes. Every practicing physician in America today knows that *only* surgery and radiation therapy are the accepted and effective methods of treating cancer. Chemotherapy has yet failed to effect a cure although it has been of real palliative worth in some forms of the disease. Use of isotopes is still largely experimental, but few of the radioactive elements having shown useful properties.

Every physician knows—or should know—that the injection of a sterile non-toxic foreign protein often causes a slowing down of a cancerous growth for an indefinite time. This causes a psychological uplift in the patient. On these two factors, of which the psychological often is the more important, the so-called benefits of quack treatment rests.

The writer, in addressing lay audiences, has been told scores of times of the physician who has told the cancer patient and/or his family "that nothing more can be done for the patient." This factor, probably more than any other, sends many cancer patients to quacks and charlatans. Why any physician would make such a thoughtless and hope-crushing statement is beyond comprehension. With such a death sentence hanging over him, is it any wonder that the patient and his family look for further help from any source? The quack, with his suavity and phoney promises, enlists their interest and for the time being makes the patient believe he is being helped.

The "nothing-more-can-be-done" sentence of the unthinking physician has done as much to line the pockets of cancer quacks as has the quack's own claims of cure. Physicians must be brought through education to realize the great disservice they are rendering to their own patients as well as to such patients everywhere, by these unfortunate and often unwarranted prognoses. Although a cure may be impossible the cancer patient often can be made comfortable for an indefinite period and so is entitled to every crumb of comfort he can be given. His faith and trust in his physician places a responsibility on that physician and symbolically on the entire medical profession to boost the patient's morale to the end.

Cancer of the larynx, especially cancer of the vocal cords, presents one early symptom, that is, hoarseness or an alteration in the voice which calls attention to its presence and permits early diagnosis.

• • •

Early diagnosis of cancer of the larynx permits cures of 80 to 90 per cent in selected cases.

• • •

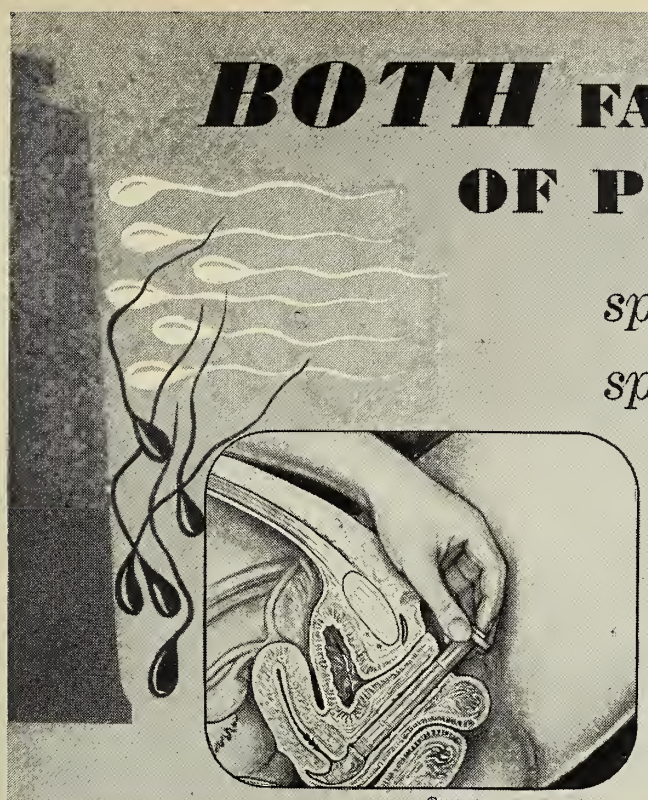
The most important factor in the diagnosis of laryngeal cancer is the recognition by the alert, aggressive practitioner that hoarseness is an early symptom and demands inspection of the larynx.

• • •

Clinical impressions alone of laryngeal cancer are not sufficient; they must be proved by biopsy.

BOTH FACTORS OF PROTECTION

sperm-blocking
sperm-immobilizing
in Ramses®
VAGINAL JELLY



ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

- Occludes the os uteri for at least ten hours after coitus
- Immobilizes sperm in the fastest time recognized by the official Brown and Gamble technic
- Maintains necessary viscosity at body temperature
- Does not decompose or separate while stored

Supplied in 3-oz. tubes with a sanitary, durable plastic applicator designed to deliver 5 cc. of jelly in front of the os uteri. Also in large, economy-size 5-oz. tubes.

A recent report by Gamble[1] directs attention to *viscosity* and *barrier effectiveness* as important considerations in the selection of a contraceptive jelly.

"To give efficient obstruction [to spermatozoa]... the material should be sufficiently fluid to spread throughout the vagina and establish a barrier over the os uteri. It should not, however, be so liquid as to leak out of the cavity or be too readily displaced from the os by coital or postcoital movements." RAMSES Vaginal Jelly* fulfills these criteria.

*Active agent, dodecaethyleneglycol monolaurate 5%, in a base of long-lasting barrier effectiveness. 1. Gamble, C. J.: Report to Council on Pharmacy & Chemistry, A.M.A.: J.A.M.A. 153:1019, 1953.

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quality first since 1883

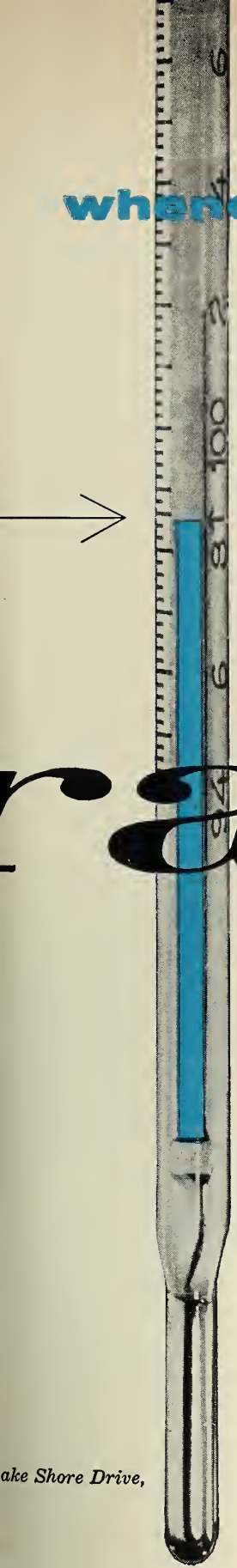
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afebrile in hours

-Tet

Basic among broad spectrum antibiotics

- *A nucleus of modern broad-spectrum activity*
- *Wide antimicrobial range*
- *Prompt response*
- *Unexcelled tolerance*
- *High blood levels*
- *Outstanding stability*



whenever you take a temperature

think of Tetracyn . . .

". . . in patients with pneumococcal pneumonia, surgical infections, or urinary tract infections . . . oral administration . . . is followed by rapid clinical response. *Symptoms, including fever, largely cleared up within 24 to 48 hours.*"*

racyn

HYDROCHLORIDE

brand of **tetracycline** hydrochloride

**English, A. R., et al.: Antibiotics Annual (1953-1954), New York, Medical Encyclopedia, Inc., 1953, p. 70.*

Supplied: Tetracyn Tablets *(sugar coated)*
250 mg., 100 mg., 50 mg.

ake Shore Drive, Chicago 11, Illinois

AMA Washington Letter

THE MONTH IN WASHINGTON

Just about a year ago the Hill-Burton hospital construction program was under heavy attack in the House Appropriations Committee. But the damage was not permanent. The program has made a complete recovery. More than that, Congress shows every intention of doubling the appropriation for the program, but earmarking the additional money for grants to diagnostic and treatment centers, rehabilitation facilities, hospitals for the chronically ill, and nursing homes. At this stage the legislation to stimulate health facility construction is believed to be closer to enactment than any other major health project of the Eisenhower administration. Although the main objectives have not been altered, some significant changes were made in the bill by the House Interstate and Foreign Commerce Committee in two weeks of intensive work at closed-door sessions. Then, in mid-March, the Senate committee took up the bill and considered additional amendments.

Most changes are designed to tighten up eligibility for grants. For example, money could go to only two types of diagnostic or treatment centers, those operated by and for a governmental unit or by a group that also operates a nonprofit hospital. Nor would centers or nursing homes be eligible unless under medical supervision or operated by an association that also operates a hospital.

Another change written into the bill would rule out a project if it were not to be open for full and unrestricted use by the general public. Thus labor union, fraternal, and prepayment health plans could not benefit if they offered their own subscribers any advantage in service at the center or hospital.

On the financial side, several amendments have been tentatively adopted. One would allow states to use the original Hill-Burton formula for apportioning money among projects, or to accept a flat 50 per cent federal contribution. (As in the original Hill-Burton act, the poorer states would be allocated more per capita.) States would be allowed to pool their allocations for construction of interstate facilities, and the United States would be authorized to recover its proportionate share of a project if at any time the project were converted to profit use or were transferred to interests which for any other reason would not be eligible.

Of major interest to the medical profession, although not far along on its legislative course, is the administration's proposal for subsidizing prepaid health plans for federal civilian employes. The U. S. would pay a maximum of $26 per year, to be matched by the employe, for the purchase of any type of prepaid insurance. Any cost above $52 per year would have to be borne entirely by the employe.

As a part of the program, the administration is proposing that payroll deductions be authorized a concession the insurance and prepayment insurance organizations have been urging for years. Currently federal executives differ on whether payroll deductions would be "legal," but none is willing to risk authorizing deductions in the absence of specific approval from Congress.

Still following a slow and controversial course is the administration's proposal for reinsurance of health plans. Early in the session—with the ardent support of Chairman Charles S. Wolverton of the key House committee—this legislation appeared pointed toward enactment. However, the Department of Health, Education, and Welfare was not satisfied with Mr. Wolverton's bill and decided to draft one of its own. The drafting consumed many weeks—time that may prove fatal with a Congress hoping to adjourn early for the fall elections.

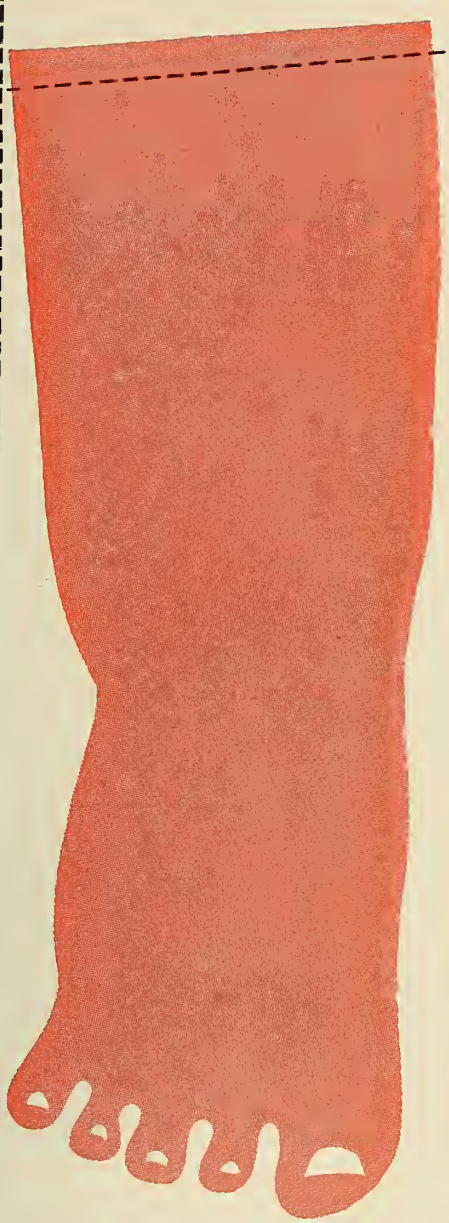
The Defense Department, made uncomfortable by a few suspected subversive physicians and dentists it doesn't quite know what to do with, is asking for an amendment to the Doctor Draft act. The department's problem is this: The most recent Court of Appeals decision holds that physicians or dentists drafted or called up from the reserves must, under the Doctor Draft act, either be commissioned or discharged. So, technically, a man who refuses to fill out his loyalty questionnaire would be rewarded by a release. To correct the situation, the Department is asking that the law be changed to allow it to withhold a commission from a loyalty suspect, yet keep him on duty for the specified time in noncommissioned status and assigned to professional duties.

The American Medical Association is continuing its support of Senator Bricker and others who are convinced they still can enact a resolution calling for an amendment to restrict international agreements. The Association's position is that unless a safeguard is written into the Constitution, future international agreements could impose on the country social and medical care programs that Congress itself would not approve.

Radioactive iodine probably has its maximum usefulness in the rare form of thyroid cancer producing metastases with hyperfunction.

• • •

Treatment of cutaneous basal and prickle cell carcinomas with podophyllin is dangerous and misleading.



"...when the patient is in acute distress from waterlogging..."

"Meralluride sodium solution (MERCUHYDRIN) in 1 to 2 cc. doses intramuscularly has been very effective and is not painful."* In acute congestive failure, MERCUHYDRIN characteristically curbs tissue inundation and relieves dyspnea, orthopnea and cardiac asthma.

Ampuls of 1 cc., 2 cc., and 10 cc. vials.

*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

MERCUHYDRIN®
(meralluride injection U.S.P.)

Leadership in diuretic research
Lakeside LABORATORIES, INC., MILWAUKEE 1, WISCONSIN

AMA News Notes

MORE "MARCH OF MEDICINE" TV SHOWS

Of special interest to TV-viewing physicians and patients afflicted with arthritis or rheumatism is the second in the Spring, 1954, series of "March of Medicine" television programs. Sponsored by Smith, Kline and French Laboratories, in co-operation with the AMA, "A Status Report on Arthritis and Rheumatism" will be carried April 29 over the National Broadcasting Company's TV network. The third program in the series, on June 24, will originate from the AMA's Annual Session in San Francisco. Like last year's series, the new "March of Medicine" programs will be presented at 10 p.m. (EST), replacing the "Martin Kane" show usually seen at that hour. The first program in the 1954 series on problems of overweight was carried March 11.

SAMA CONVENTION SET FOR MAY 1-3

"In spring a young man's fancy lightly turns to thoughts of love . . ." But this spring the young medical student also is beginning to make plans to attend the Student American Medical Association's fourth annual convention to be held May 1-3 at the Sherman Hotel, Chicago. Offering an outstanding program of panel discussions, speakers and exhibits, this year's meeting promises to be the biggest ever staged by SAMA.

Convention highlights include: A scientific paper—"On Becoming a Physician"—delivered by noted Detroit psychiatrist, Leo H. Bartemeier, M.D.; a round-table discussion entitled, "Tell me, Dean," moderated by John F. Sheehan, M.D., dean of Stritch School of Medicine, Chicago, and a forum on "The Future of Internships." In addition, more than a score of technical exhibitors will display their products at SAMA's second such exhibition. The House of Delegates, official policy-making body of the Association, will be in session May 1 and 3, with Sunday, May 2, to be devoted to the program proper. Members of SAMA and physicians alike are cordially invited to attend.

AUDIO-DIGEST OFFERS "TWO FOR THE MONEY"

Busy physicians cannot afford to pass up this opportunity to get "two for the price of one" in the form of postgraduate medical education and a chance to support the nation's medical schools. The American Medical Education Foundation recently announced that a new source of funds now is available to medical schools through physician-support of the Audio-Digest Foundation. For a nominal weekly subscription fee, physicians receive from the Audio-Digest Foundation tape-recorded abstracts of current literature, lectures, etc., culled from current medical periodicals in all fields of medicine. This Foundation, organized by the California Medical Association, will turn over its profits to the AMEF.

State AMEF chairmen have been asked to support the national promotion of this new service as an additional means of raising funds for medical education. This should prove a tremendous boost to the AMEF's 1954 campaign drive for two million dollars from the medical profession to assist the country's 79-approved medical schools.

MEDICAL SCHOOLS SHORT OF FUNDS

A critical shortage of operating funds for the nation's 79 medical schools is threatening the future of American medicine, Dean Stanley E. Dorst of the University of Cincinnati College of Medicine said recently.

In a prepared talk at a meeting of the medical advisory committee of the National Fund for Medical Education and the Council on Industrial Health of the American Medical Association at Mellon Institute, Dean Dorst said:

"Something must be done to remedy the situation or the nation will have been found guilty of one of the most costly economies in its history. We are neglecting the goose that lays the golden eggs of the future."

Dorst, president of the association of American Medical Colleges, said progress in medical education within the past 30 years has made possible the best medicine the world has seen. He added:

"But today the entire achievement is threatened. At a time when the prospects for further advancement seem brighter than ever before, the schools of medicine are threatened with a critical shortage of non-restricted funds."—*The Bulletin of the Pierce County Medical Society* (Tacoma, Wash.) February, 1954.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 352)

- **Legal Counsel J. Joseph Herbert** rendered an opinion on insurance forms in industrial cases, following question from Washtenaw County Medical Society; Mr. Herbert also presented verbal opinion on several proposals, of medical interest, now before the Michigan Legislature.

- **The monthly report of Rheumatic Fever Coordinator Leon DeVel, M.D.,** was presented and approved.

- **The monthly report of the Public Relations Counsel** included a review of legislation of interest to the medical profession and

- **Chairman Otto O. Beck, M.D., gave a progress report** on the Beaumont Memorial and the plans for its dedication on Mackinac Island, July 17, 1954.

"...use a little wine for thy stomach's sake and thine often infirmities..."

—Paul

The use of wine in nutrition and in medicine dates back to the beginning of history. It is recorded in the ancient Egyptian papyri, in the Bible—as in the oft-quoted admonition from Paul to Timothy—and in epicurean and medical annals from Hippocrates down to our own times.

In recent years there has developed a demand within the medical profession that the true values of wine be determined, and that fact be separated from folklore. Accordingly, fifteen years ago, research projects in many American medical centers were initiated to determine by modern scientific techniques the food values and medical uses of wine.*

The investigations have brought forth evidence which may be of interest and practical value...

...Wine stimulates the appetite in anorexia, and gently increases gastric secretion.

...Wine serves as a quick-energy food. Its small amount of hexose is speedily absorbed, and its moderate content of alcohol is metabolized readily, even by diabetics. Its B-vitamins and absorbable iron make it a useful supplementary source of these substances.

...Wine possesses significant diuretic, vasodilating and relaxing properties. The gentle sedation provided by a small amount of wine at bedtime is a pleasant aid in inducing restful sleep.

...A little wine before or with the meal can offer a needed element of "graceful living" to the patient... it can help in the psychological care of the elderly and the convalescent.

In California (and in other regions, too) a combination of soils, climates and modern wine-making skills makes it possible to grow the world's finest wine grapes of every variety, and to produce wine of strict quality standards, true to type, moderate in price.

*Research information on wine is available upon request.

Wine Advisory Board • San Francisco 3, California

Say you saw it in the Journal of the Michigan State Medical Society

A REPORT . . .

to the Doctors and Hospitals of Michigan

GROWTH AND PAYMENTS OF YOUR BLUE CROSS-BLUE SHIELD PLANS CONTINUED TO CLIMB IN 1953

Here are the facts, as of Dec. 31, 1953:

- Blue Cross membership.....3,127,128
- Blue Shield membership....2,973,673

These totals represent an increase of about 8% during the past year. This means that now almost half the people in the State of Michigan have Blue Cross-Blue Shield protection.

- More than 15,000 professional, business and farm groups now offer Blue Cross-Blue Shield benefits to their members.
- Payments to doctors and hospitals amounted to more than $90,000,000 last year alone. During their 15 years of operation your Plans have made payments totaling $400,000,000 for care of members.

STATEMENT OF CONDITION

Report of Condition as of the Close of Business December 31, 1953

MICHIGAN HOSPITAL SERVICE

ASSETS

Cash in Banks and Office	$ 5,404,102.99
Real Estate—Home Office Property	801,010.58
United States Government Securities	16,888,864.47
Accrued Interest	104,901.47
Subscription Fees—Receivable	217,626.69
Funds Advanced for Veterans Administration	101,198.57
Other Assets	214,679.47
Total Assets	$ 23,732,384.24

LIABILITIES AND RESERVES

Reserve for Payment for Services Rendered Subscribers (Including Unreported)	$ 11,721,450.00
Reserve for Unearned Subscription Fees	4,612,445.90
Reserve for Contingencies	6,692,642.30
Other Liabilities	705,846.04
Total Liabilities and Reserves	$ 23,732,384.24
Total Benefits Paid Since Inception	$268,900,791.29

MICHIGAN MEDICAL SERVICE

ASSETS

Cash in Banks and Office	$ 3,577,597.06
Real Estate, Home Office Property	637,727.36
Bonds, Government and Railroad	8,187,055.91
Interest, Due and Accrued	57,262.81
Subscription Fees—Receivable	63,371.08
Funds Advanced for Veterans Administration	125,594.27
Other Assets	504,501.47
Total Assets	$ 13,153,109.96

LIABILITIES AND RESERVES

Reserve for Payments for Services Rendered Subscribers (Including unreported)	$ 4,183,094.84
Reserve for Unearned Subscription Fees	1,896,676.84
Reserve for Contingencies	6,834,202.75
Other Liabilities	239,135.53
Total Liabilities and Reserves	$ 13,153,109.96
Total Benefits Paid Since Inception	$121,508,138.70

BLUE CROSS-BLUE SHIELD

Michigan Hospital Service - Michigan Medical Service

234 State Street - Detroit 26

Say you saw it in the Journal of the Michigan State Medical Society

Calm, Relaxed AND *Awake*

MEBARAL®

BRAND OF MEPHOBARBITAL

WINTHROP

for the hyperexcitability so often found in

hypertension
hyperthyroidism
convulsive disorders
difficult menopause
psychoneurosis
hyperhidrosis

Mebaral's soothing sedative effect is obtained without significantly clouding the patient's mental faculties.

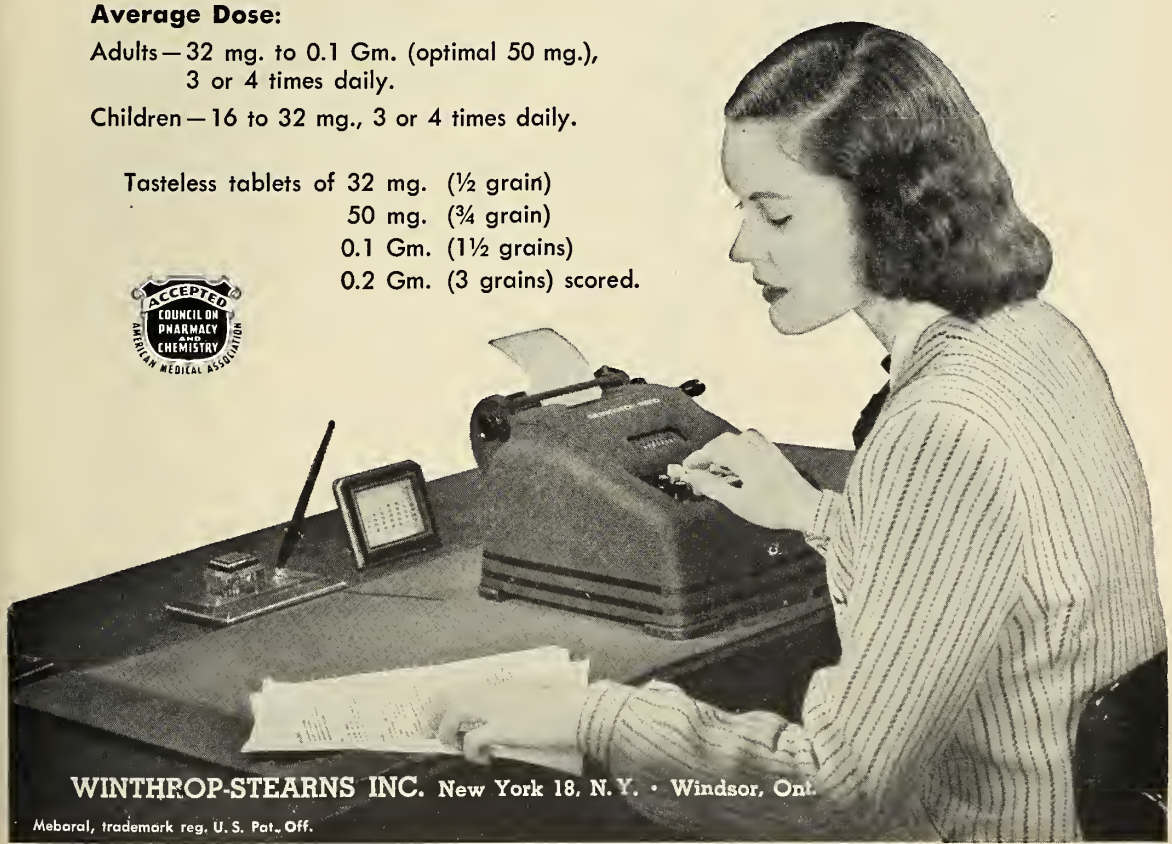
Average Dose:

Adults—32 mg. to 0.1 Gm. (optimal 50 mg.), 3 or 4 times daily.

Children—16 to 32 mg., 3 or 4 times daily.

Tasteless tablets of 32 mg. (½ grain)
50 mg. (¾ grain)
0.1 Gm. (1½ grains)
0.2 Gm. (3 grains) scored.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION



WINTHROP-STEARNS INC. New York 18, N. Y. • Windsor, Ont.

Mebaral, trademark reg. U. S. Pat. Off.

What's so *different* about the Viso-Cardiette?

THESE ARE THE COMPANY POLICIES



THAT LEAD TO THESE ADVANTAGES

SANBORN SPECIALIZES. Sanborn's *primary* and *major* interest in the medical field for the past 35 years has been the design, manufacture, and servicing of electrocardiographs. Sanborn men can therefore *concentrate* on your interest in this type of equipment.

SANBORN SELLS DIRECTLY. Each of the many thousands of Sanborn diagnostic instruments in service today has been shipped *directly* to its user. No intermediate sources are ever involved between Sanborn Company and the buyer. This permits a standardization of prices, and the cost of a Viso-Cardiette is the *same* to *every* physician.

ECG DESIGN KNOWLEDGE. Sanborn's 30 years of specialization and intimate contact with the profession's heart testing needs results in a *complete* and *concentrated knowledge* of electrocardiograph manufacture.

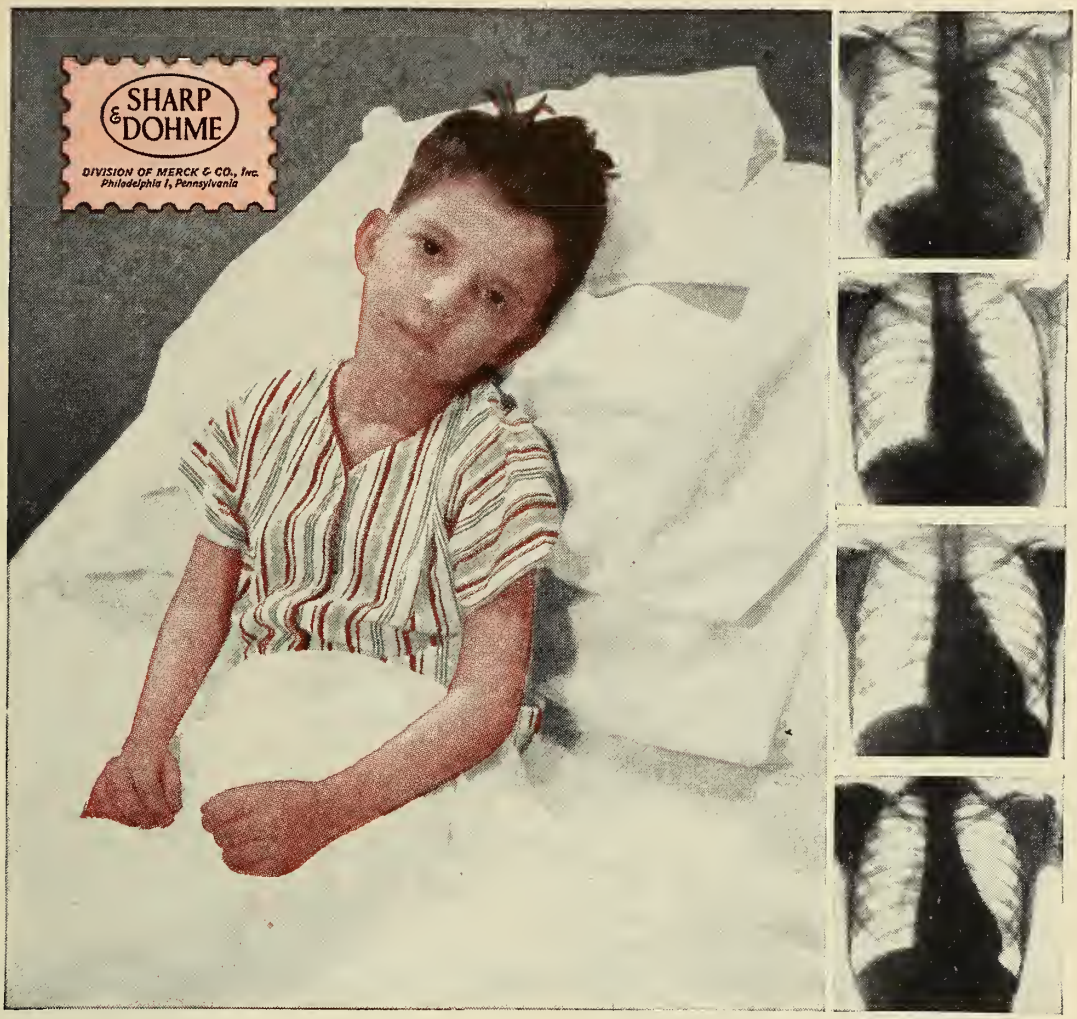
EXTRA BENEFITS. These stem from the Sanborn "direct-to-you" policy, and include: the bi-monthly "Technical Bulletin", which is sent free of charge to every owner; the 15-day, no-obligation, try-before-you-buy plan; and the opportunity to deal *directly* with the maker of your electrocardiograph.

EXTENSIVE COVERAGE. The need to keep a *close contact* with Sanborn owners, and those about to be, requires a *wide* network of offices. Sanborn has thirty, one of them near you!

Because Sanborn DEPENDS on your satisfaction, YOU can depend on Sanborn people and Sanborn products. Descriptive literature which tells more about the Viso-Cardiette and the 15-day trial plan is available on request.

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1. Greenblatt, R. B., and Kupperman, H. S.: M. Clin. North America *30*:576 (May) 1946. 2. McGavack, T. H., in Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 225.

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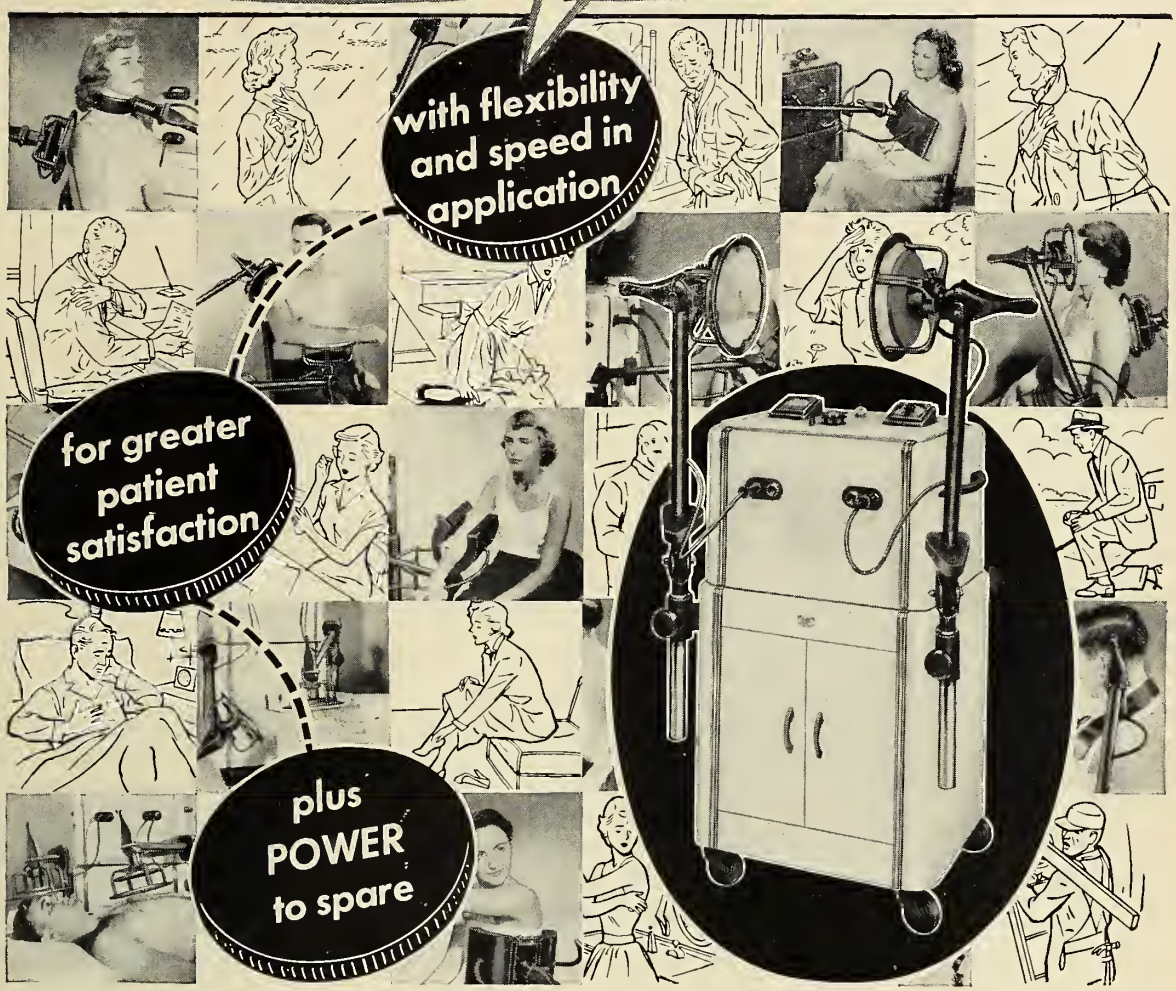
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Report of Cancer Progress

By Harry M. Nelson, M.D.
Detroit, Michigan

THE AMERICAN Cancer Society held its fortieth annual meeting in October, 1953, the eighth anniversary of its complete reorganization. We have come a long, long way since the Society was founded two score years ago. Time does not permit a detailed review of this progress. It has been a most successful year for the American Cancer Society and its Southeastern Michigan Division. As many of you who are veterans in cancer control realize, it has been the most rewarding year in the history of the Society.

All of you can look back with warm satisfaction and rightful pride on the steady progress made in all aspects of the attack on cancer. I don't think the public realizes the tremendous contribution that is made by board members and the committees of that body. Perhaps I am biased when I speak of the caliber of the people who are in this struggle against cancer, but it seems to me, and I say this honestly and with great humility, that the army of volunteers who are the real strength of the American Cancer Society are among the noblest in the land. Every bit of our success ultimately depends upon the volunteers. Without their devotion, without thousands of hours of service given by these fine people, all the planning of policies and fine direction would have been meaningless. But with it, we are able to point to the unparalleled achievement during the past year in research, education and service to the cancer patients.

I don't want to labor this point of praise, but I do know that all of you will concur in the viewpoint that we have had splendid leadership from our executive director, Edward Tuescher. Never have the affairs of our division been so efficiently and expeditiously administered as they now are under his direction.

Close association with the staff has given me a clearer understanding of the many large and complex operations of this office. Although these operations are varied in range and complexity, they are met with a high degree of initiative and enthusiasm and at times, I think it is only fair to say, with a certain amount of ingenuity. I want to emphasize that none of these people, capable as they are, ever did this alone. They have had the co-operation of every volunteer. The links in this co-operative chain extend right down to the smallest units in our division.

There has been a real awakening to the seriousness of the cancer problem. More and more people are turning to our units for information and help. The public has given a great vote of confidence to the American Cancer Society. We see it in the last unprecedented material success achieved in the fund-raising campaign. It netted nearly $20,000,000. This represents at once, a vote of confidence by the people both in the Society's accomplishments and in the Society's policies, its aims and goals. Because of this great public interest, there has been more written in our newspapers and magazines about cancer than ever before. More radio time has been given to cancer. Fortunately, newspapers rarely proclaim a "New Cancer Cure Found" any more. The new type of reporter, the science writer, with some academic background in science writes exclusively on medi-

*Presented at the annual meeting of the Southeastern Michigan Division of the American Cancer Society on December 15, 1953.

cal and scientific subjects. The public is getting a more accurate interpretation of new discoveries in medicine.

However, all of our local newspapers, radio and television stations are to be commended and sincerely thanked for their co-operation and interest during the past years. Many have gone out of their way to do an outstanding job of reporting vital cancer information to their readers. Literally thousands of requests for more information have come in as a result of the messages which have been given in print and over the air.

Among the outstanding editorial highlights was the series of cancer research articles written by Pat McGrady of the National American Cancer Society staff, carried in the *Detroit News* last April. This group of stories was followed up by Merle Oliver's startling exposé on vicious cancer quackery which exists right in our own communities.

Jack Pickering of the *Detroit Times* has consistently been sympathetic and co-operative and deserves our heartiest thanks for his unfailing interest.

The Detroit Free Press must be congratulated for its pioneering effort to provide the people with medical information and advice of individual concern through a series of medical forums for lay people. Miss Jean Pearson, who supervised the program, did a distinguished job. The panel on cancer, in which three of our division trustees participated, was a highlight of the series. All other newspapers, both daily and weekly, have shown unusual interest in cancer control, and must be heartily thanked and congratulated for their fine work.

All radio and television stations have contributed hundreds of hours of air time to cancer control during the past years. Often heard on all of them are our short spot announcements urging people to learn the cancer facts, and to write for a free booklet on cancer.

Our success in the campaign and the public's increasing awareness of the threat of cancer gives us not only a better chance to do our job but places on us all an enormously increased responsibility. Ten years ago, 67,000 persons died of cancer. This year the figure will be 225,000. By 1963, the total may reach more than 270,000. That 270,000 depends to a considerable degree on how energetically and effectively we work. The public recognizes our leadership and properly looks to us for guidance, for progress and for achievement.

The American Cancer Society is the only voluntary health agency in the United States having a total program for controlling cancer. Research will, in time, be the means to ultimate and complete control and when the secrets of abnormal growth are finally discovered, effective treatment methods and perhaps even prevention will be realized. Education, public and professional, and service to the patient are the two arms of the effort to achieve the fullest possible measure of control of cancer immediately. They operate to this end by mobilizing and utilizing to the full all of the knowledge now at hand.

The question is sometimes asked in program planning and budgeting or in preparing campaign material "Which of these three major programs—research, education and service—is the most important?" There is general agreement that in the long-range view, research stands first, because even under the optimal conditions of treating cancer today, it is not likely that more than one-half of its victims can be cured. Only a better understanding of the fundamental causes of cancer and the discovery of more effective treatment methods can achieve the ultimate goal. But it is improbable that this goal will be gained quickly. In the meantime there are lives to be saved. In the short-range view, the immediate objective—cancer control to the fullest extent possible at this time—is hardly less pressing to those now living and appraising the odds of having to engage cancer which are steadily mounting, and even now stand one to four. The strategy of immediate cancer control—the question of the relative importance of service and education—is largely rhetorical, for like the heart and the brain, neither can function effectively without the other. All the technology of modern medicine still stands helpless, a mere potential, unless it can be brought to bear on reasonably localized disease, which is the purpose of education, and all the education which can possibly be accomplished would be useless in a mere potential were there not adequate professional services to meet the circumstances which wider understanding creates.

With the advent of newer developments in treating the patient with cancer, radical surgical procedures, more precise radiation therapy techniques, recent advances in medical treatment, the practicing physician has a greater responsibility than ever before to recognize cancer earlier in his patient and to promptly institute proper treatment. Cancer is more curable today than it ever has been.

There is no case of cancer, no matter how advanced, in which there is nothing to be done. There is no disease of comparable magnitude in terms of mortality, long term invalidism, economic loss and social burden so susceptible of immediate substantial relief as cancer. It is for that reason, that your medical and scientific committee has given so much of our budget to professional education.

We have continued our support of the Michigan Clinical Institute of the State Medical Society. The last session was held on March 12, 1953, in the Sheraton-Cadillac Hotel. We helped plan and support the Fifth Michigan Cancer Conference in Lansing last October. The clinical sessions of the scientific meeting held in Detroit each fall, are financed by the Southeastern Michigan Division.

Every physician in our area receives six issues a year of "CA—A Bulletin of Cancer Progress." Issues are also sent to every hospital and to the senior students, College of Medicine, Wayne University. The distribution of cancer monographs has been continued. The coming year will show even greater increase in the distribution of monographs as there are two currently in production and two more scheduled for editing.

A marvellous exhibit, depicting the activities of the Cancer Center, was shown for the first time at the annual meeting of the Michigan State Medical Society held in Grand Rapids. We are grateful to the college of medicine and others who helped make this exhibit possible. It was viewed by many physicians who regarded it as one of the best exhibits shown.

The latest in the series of films for doctors released by the society and the National Cancer Institute has been released and is available. It is the fifth such production and covers "Cancer of the Oral Cavity."

This year, we have inaugurated the colored television program series for practicing physicians. These programs have originated in New York and have been received in Boston, New York, Philadelphia, Pittsburgh, Toledo, Detroit and Dearborn. The general practitioners made up about 70 per cent of the audience. There has been an average of about 185 who have viewed this telecast at the Masonic Temple and 117 at the Rotunda in Dearborn. I am sure that everyone who has witnessed this splendid teaching demonstration was as impressed as I have been with its factual, interesting and dramatic presentation. The long hard work of this project will pay dividends. This is truly a new and effective means of communication for professional education. The fact that the programs have been kinescoped, makes them available for showing to a potential audience of every doctor in the country.

No other disease calls for such varied and complex service as cancer does. The quality of cancer service in the community can be directly related to local professional interest, experience and competence. We are primarily concerned with rendering the best possible medical services available to all cancer patients who need them. Service is an important segment of the year-round volunteer program of the society. The goal of the service program of the American Cancer Society is basically threefold. First, to prevent deaths from cancer—second, to prolong the lives of those with incurable cancer—third, to relieve or minimize the suffering from cancer. The service program begins with the dissemination of information about cancer as carried through the phases of detection, diagnosis, treatment, rehabilitation and palliation or terminal care. The service aspect of the cancer control program provides the means by which lay and professional education can be put to use. There are three subdivisions of service, each with its own area of effective endeavor. First, professional services— Second, supplementary services—and Third, Volunteer Services.

I shall discuss only briefly the professional services. This phase of the program includes the development of cancer diagnostic and treatment facilities, medical and nursing care and social service. Recognizing the importance of case finding in cancer control, the service program encourages the development of a cancer detection program through the more general adoption by physicians everywhere of the society's suggested policy—Every doctor's office a cancer detection center. Detection Center examinations of all citizens are not practical, yet it is known that a large section of the public does visit a physician at least once a year. It is either in the doctor's office or in the community clinic that every possible effort must be made to provide examinations for cancer. Through these examinations, the most accessible cancers will be diagnosed earlier when the likelihood of cure is greatest. The Yates Clinic serves additional purposes:

1. Educating the layman to accept his personal responsibility for health maintenance, which re-

sponsibility becomes increasingly important as he grows older.

2. Affording the practicing physician the opportunity to see the dividends of case finding methods and to learn how to apply them skillfully.

The Yates Clinic, under the direction of Dr. Gerald A. Wilson, is serving a relatively small percentage of the population; however, it is performing an important function in graduate education and in clinical research.

Many patients with cancer, will at some time or other, require the services of a nurse. By cooperation with the Visiting Nurse Association, we have been able to provide home service for indigent cancer cases. Such a program is not only of great personal value to the patient, but will also allow patients to be discharged from the hospital sooner. This relieves the shortage of hospital beds while the patient is adequately cared for at home by the visiting nurse.

Still within the realm of professional service is the important field of social service, which assists the patient, the family and physician to meet the economic, emotional and social needs of the patient and his family. One of the most valuable of the many functions of social service in a cancer control program has been the follow-up of cancer patients who are under the supervision of the local cancer clinic.

Within the category of supplementary services, are information service, loan fund, occupational and recreational therapy, rehabilitation service, research program, miscellaneous grants and terminal care. These will be mentioned in more detail as part of the lay program.

The National Research program which, since its inception in 1946, has aggregated something like $25,000,000.00 spent in support of grants-in-aid, institutional grants and fellowships, is the greatest single scientific effort ever concentrated on a single disease. The attack has been through many angles both fundamental and clinical research, in more than 100 institutions throughout the country. I believe that our Detroit Institute of Cancer Research is one of the most important of these.

The fight against cancer in America is unique. The co-operation between this great volunteer health organization and the United States government is indeed fortunate. The close working relationships with the National Cancer Institute of the United States Public Health Service have greatly facilitated and strengthened the program.

We who have seen the Federal appropriations grow from year to year are grateful for this important source of funds to fight cancer in the laboratories and, I can add candidly, that the people in the National Cancer Institute appreciate it too. We realize that much of the initiative to have these appropriations increased stem from the vigorous efforts of the American Cancer Society. I think we can be satisfied with the progress in our laboratories. We can feel that we are providing much of the support that is needed. We must continue to look to the needs of these people because somewhere in the mind of man is the answer that will spell freedom from the fear of cancer for all time. On equal footing with researchers in combatting cancer are the members of the medical profession. It should be a source of satisfaction to all of us to contemplate the increasing measure of respect accorded the American Cancer Society by the medical profession. The number of skeptics is decreasing. The number of our interested, articulate and effective doctors who wish to participate in our work is on the increase. The program of professional education is being well received, and both the general practitioner and the specialist have accepted and endorsed the society's efforts to increase professional awareness and competence in the field of cancer diagnosis and treatment.

The fact that this year the American Cancer Society was invited to participate in the meeting of the Shipman Committee of the American Medical Association is significant. This committee is making a study of the relationship of the AMA to the voluntary health organizations. Its objectives were outlined as follows:

1. To establish effective liaison between the voluntary health agencies and the medical profession at the top level.

2. To assist in the development of all constructive programs, legislative and otherwise.

3. To insure the co-operation of medicine and the voluntary health agencies in accomplishing the objectives.

4. To co-ordinate the efforts of voluntary health agencies and public health.

Another important step taken during the past year was made by the Cancer Committee of the American College of Surgeons. The American College of Surgeons announced during the year an accreditation requirement for hospitals con-

ducting cancer programs, making a hospital cancer registry a requisite for the college's approval of a cancer clinic or a cancer diagnostic clinic and further, establishing a new category of cancer facility for institutions not conducting such clinics, namely, a cancer registry. The important purpose of a hospital cancer registry is to assure periodic review and evaluation of the total cancer experience in a given institution. A cancer registry contains a record of every cancer patient, both private and public, both in-patient and out-patient admitted to the hospital. It includes an abstract of each patient's clinical records with an annual follow-up of notes. This is most important. We certainly will know more about the extent of the disease, the influence of certain environmental factors and the results of treatment.

A spur to activity this year is the formation of the Michigan Cancer Co-ordinating Committee. This committee had its first meeting on November 12. It has as members three representatives from the Michigan Division of the American Cancer Society, three representatives from the Southeastern Michigan Division of the American Cancer Society, the Commissioner of the Michigan Department of Health, a representative from the Michigan Health Officers Association, a representative from the Michigan State Dental Society, four representatives from the Michigan State Medical Society. It was felt that this co-ordinating Committee would co-ordinate and integrate all the activities of the various cancer groups in the state.

One important activity of the volunteers that I should like to mention briefly is the study on lung cancer. A group of our volunteers are keeping accurate records on 6,727 men over fifty-five. A total of 205,000 are being studied nationally. We believe that this study and the tabulation of 300,000 World War I veterans will give us a clue as to whether smoking is a factor in the increased incidence of lung cancer. Cancer of the lung in men is increasing at a rate which is truly alarming. It will soon be the leading cause of death from cancer. If we are unable to influence the present trend by 1970 it will outnumber all other deaths from cancer combined.

The causes of lung cancer are still undetermined. Smoking, automobile fumes, dusts and other air pollutants are major factors. We are greatly concerned not only because of the 22,000 deaths from lung cancer in 1953—18,400 men and 3,600 women—but more so because of the 5 per cent increase in deaths from this form of the disease over the preceding year. The American Cancer Society's position in the question of a possible cause-effect relationship between cigarette smoking and lung cancer is that at present, evidence is not available to state with certainty that smoking is a cause of the increase in lung cancer. There should be extensive statistical and laboratory studies of a possible relationship.

Our research committee and its advisors, the Growth Committee of the National Research Council, have functioned on the plan that the most imaginative and powerful movements in the history of science have arisen not from plan, not from compulsion, but from the spontaneous enthusiasm and curiosity of capable individuals who had the freedom to think about the things they considered interesting.

A full-time program directed toward the overall rehabilitation of all laryngectomized persons in the Detroit area, began in September. Arthur Riske was appointed full-time esophageal speech instructor. Serving in a volunteer capacity for the last four years, Riske had taught many Detroiters who had been left speechless by cancer of the larynx. Because of the increasing need for more speech classes, the expanded program provides for four day-time and two evening classes weekly. Riske also visits patients in hospitals, homes and places of employment, to assure and encourage them to use their new voices properly. Esophageal speech can be learned by most patients. It involves the substitution of the esophagus and stomach for the lost vocal cords. Patients often master the technique in several weeks and are able to resume normal social and business lives.

We can achieve in our times a respectively greater control over this scourge by giving its social aspect full expression. While our ordinary civic duties seem burdensome, it is necessary to endorse, to encourage, to counsel and to participate in this voluntary enterprise now organized against cancer. Mobilization and organization of the County's medical and scientific resources for an intensive, sustained and co-ordinated inquiry into the nature of cancer and its control have come a long way. Despite these many recent advances, the problem is still a vast one.

(Continued on page 389)

Cancer Detection at the Yates Memorial Clinic

By Gerald S. Wilson, M.D.
Esther H. Dale, M.D.
Thomas B. Patton, M.D.
Detroit, Michigan

THE CHIEF obstacle to the cure of cancer is its tendency to change from a local and curable disease into a disseminated and incurable one. Hence, the best method available at the present time to effect a cure is recognition of the malignancy in its earliest form while it is still localized or better yet recognition and eradication of lesions which, while not yet malignant, possess definite malignant potentialities. Because of this concept, the medical profession and the American Cancer Society have encouraged various forms of cancer detection programs aimed at discovering these lesions in their earliest stages.

Early recognition of cancer can be accomplished in several ways. The first and the ideal of any cancer detection program is for every doctor's office to be a cancer detection center. The Hillsdale plan for tumor detection, instituted in 1947 in Hillsdale, Michigan, functions under such a concept. Since cancer of the skin, breast, cervix, and rectum account for well over 60 per cent of detectable cancers, and since these areas can be examined readily by any doctor without special equipment, the essence of this program is to examine in the physician's office every patient over forty years of age at six-month intervals. Examinations are on a fee basis, involve little extra paper work to the practicing physicians, and insure an excellent patient-doctor relationship. This method has the disadvantages that it is a limited type of examination, it is done by doctors of varying competency and with varying thoroughness, and statistical data accumulated by such a system is difficult to evaluate.

The opposite of the Hillsdale plan is a central cancer detection center such as the Strang Clinic at the Memorial Center, New York City, and the cancer detection clinics associated with the various medical schools. In these centers, examinations can be complete, done by highly trained personnel, and the results are already centralized, making statistical evaluation a relatively simple problem.

TABLE I. NUMBER OF PATIENTS EXAMINED

Year	Patients Examined	% Male	% Female
1950	2,238	20.3%	79.7%
1951	3,975	20%	80%
1952	4,414	21%	79%
1953	4,639	20.5%	79.5%
Total	15,266	20.5%	79.5%

The Yates Memorial Cancer Clinic, representing one of the latter type of clinics, was established in 1950 by the Southeastern Division of the American Cancer Society and is operated professionally by the Wayne University College of Medicine. Patients come to the clinic through the stimulus of information gained through the radio, magazines, newspapers or private physicians. Before being examined, the patients must state the name of the private physician to whom the report is to be sent. A complete history and physical examination is performed, including in the female a pelvic inspection with routine Papanicolaou smears of the cervix and vagina. Sigmoidoscopic examinations are done regardless of sex or age. Complete blood counts and urinalyses are performed on each patient and biopsies are taken when indicated. Ear, nose, and throat examinations with visualization of the vocal cords are made and roentgenograms of the chest are obtained when symptoms warrant. The diagnoses and recommended treatment are not discussed with the patients; rather they are instructed to consult their private physicians.

The basic aims of the Yates Memorial Clinic as postulated when the clinic was initiated in May, 1950, are: (1) to operate a small model teaching clinic, (2) to provide facilities for the early diagnosis of cancer, and (3) to gather statistical data on the prevalence and incidence of cancer in the community. Actually, the facilities of the clinic enable the handling of less than 1 per cent of the people in the community needing this type of diagnostic service.

From May, 1950, through December, 1953, 15,266 patients (Table I) have been examined at the Yates Clinic. In most cancer detection centers

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TABLE II.

Period of Operation: May 15, 1950—Dec. 31, 1953				
Total Number of Patients Examined:			15,266	
Total Number of Proven Malignancies 305	Pelvic Malignancies		129	42.3%
	Breast Malignancies		63	20.7%
	Malignancies of Gastro-intestinal Tract: 62—20.3%	Malignancy in Rectal or Sigmoid Polyps	22	7.2%
		Malignancy not in Polyps	40	13.1%
	Miscellaneous (Skin, Tongue, Lip, etc.)		51	16.7%
Incidence of proven Malignancy				2.0%

there is a decided preponderance of women. The female majority can probably be explained on the basis of the greater prospect of detectable lesions in a curable stage in women and their ability as housewives to accommodate to the daytime clinic hours.

Table II shows the incidence of proven malignancy and a general analysis of distribution by site. Pelvic malignancies constitute the largest group of detectable cancers, followed by breast and the gastrointestinal tract, and finally, the miscellaneous group. The relatively high overall rate of proven malignancy in this clinic (2 per cent) as compared to other series[1,2,3] is partly explained by the fact that not all our examinations can be classified as true "detection" examinations. Cancer "detection" implies the examination of an asymptomatic and presumably healthy individual and the prevalence of cancer found often reflects the thoroughness with which symptomatic cases are weeded out and refused examination. Although the Yates Clinic primarily services the asymptomatic patient, only those with complaints obviously related to cancer are denied examination. The second reason for the high rate of malignancy in this clinic is the emphasis placed on vaginal and cervical smears and the generous use of biopsies. Of the 15,266 patients examined, 1,410 or 9.2 per cent have had a biopsy of some suspicious area.

In addition to the proven malignancies, 9 per cent of all patients examined are suspected of having cancer, or cancer cannot be ruled out, and these patients are referred back to their family physician for further diagnostic evaluation. An endeavor is being made at the present time to follow all patients with suspected or known malignancy through contact with their private physician.

As a part of such a thorough examination, many non-neoplastic diseases are discovered and these conditions are also reported to the patient's physician. Of interest is the fact that over 85 per cent of patients entering the Yates Clinic are discovered to have one or more diseases, many of which have already been diagnosed by their family physician.

The employment of exfoliative cytology as a screening method to detect early cancer of the uterus has been carefully studied in this clinic. Although several methods of obtaining cervical-vaginal smears are employed the use of a wooden spatula has been found most satisfactory in our hands. This is a very simple device which can be made from an ordinary tongue blade. One end is rounded and the other end is cut into a double pointed tip. The pointed end is introduced into the external os and rotated. The rounded end is used to scoop up some of the vaginal secretions. It has been the experience at the Yates Clinic that the material obtained from the cervical scraping is more valuable than the vaginal fluid because the cells are less macerated and deteriorated. The fixative solution and the staining method are those recommended by Dr. Papanicolaou.[5]

Several ways of reporting smears are being used in this country. The classification employed at the Yates Clinic is that proposed by Graham[4] consisting of: negative, atypical, suspicious, and positive. The first and last classes need no clarification. An atypical smear is one in which some cells, although not normal, are characterized by abnormalities of insufficient degree or kind to arouse suspicion of malignancy. A suspicious smear is one in which the cells are so abnormal as to suggest a definite possibility of malignancy.

It should be emphasized that the Papanicolaou smear is a method of screening for cancer which if positive, especially in the case of vaginal-cervical smears, points the finger of suspicion to this area and indicates the need of a biopsy. Smears are not diagnostic in themselves and treatment should not be initiated on the basis of the smears alone. On the other hand, in some cases where a positive smear has been obtained and the biopsy is negative, it is entirely possible that the specimen was not taken from the area in question. For statistical purposes the positive smear does not definitely classify the case as malignant until a confirmatory biopsy has been obtained.

Of 12,015 women in whom cervical-vaginal smears were examined, malignant neoplastic cells

TABLE III.

Period of Operation: May 15, 1950—December 31, 1953				
Number of Women Examined				12,015
Number of Positive Vaginal-cervical smears (cases)				137 (1.14%)
Follow-up in 137 Cases with Positive Smears	Not Biopsied			16
	Biopsied Cases: 121	Histologically Confirmed: 109 cases	Biopsy at Yates Clinic	103
			Biopsied Elsewhere	6
		Negative Biopsies		12
Percentage of Accuracy	109 Positive Biopsies in 121 Biopsied Cases			90.1%
	"False Positives"—12 cases			9.9%

were found in 137 cases or 1.14 per cent (Table III). In sixteen cases biopsies were not obtained and these are not included in the calculation of the percentages. That biopsies were not performed in these cases was due to several reasons. In some instances, the patients neglected to keep appointments for a return visit to the clinic. In other cases, the patient's physician stated that he examined the patient and saw no reason for a biopsy. Unfortunately, the lack of a grossly visible lesion is no guarantee of freedom from carcinoma, especially carcinoma of the cervix. Of the patients with positive smears 121 were subsequently biopsied either at the Yates Clinic or elsewhere and the diagnosis was confirmed in 109 cases or 90.1 per cent.

Of even greater significance is the fact, as noted in Table IV, that fifty-six of the cancers of the female genital organs as a whole and fifty-two of the squamous cell carcinomas of the cervix were first suspected by smear and later confirmed by biopsy. Before the smear was found to be positive, a thorough history was taken and a physical examination performed including a pelvic examination with direct visualization of the cervix by a gynecologist at which time no evidence of neoplasm was encountered. Without the smears as a screening procedure these lesions would have been missed at a stage most amenable to cure.

Forty, or 35.4 per cent of the cervical carcinomas were considered pre-invasive (carcinoma *in situ*) by biopsy but are classified as probably or possibly rather than definitely pre-invasive because of the impossibility at times of determining by biopsy the true extent of the disease. Not infrequently, more complete histological examination of such cervices will reveal areas of outright invasion.

An important function of the clinic is to act as teaching center in affiliation with the Wayne University College of Medicine, where physicians

TABLE IV.

Total Pelvic Malignancies Diagnosed or Suspected First by Smears		129 56	 43.8%
Squamous cell Carcinoma of Cervix:	Probable or Possible Pre-invasive Carcinoma	40	35.4%
	Invasive Carcinoma	73	64.6%
113 cases	Diagnosed or Suspected first by Smears	52	46.0%

may learn the routine procedures and the newer diagnostic methods employed in recognizing early cancer. Postgraduate students participate in daily clinics where, under the supervision of one of the staff physicians, they perform the various procedures. It is the hope that through this means the clinic will set a standard for cancer detection in the community and will educate the doctor as well as the public in what to expect from such an examination. This will ultimately increase the effectiveness of cancer detection in the place where the great bulk of detection will eventually be done —the doctor's office.

Summary

1. This paper reports the aims of the Yates Memorial Cancer Detection Clinic and discusses some of the findings in 15,266 patients covering a period of operation from May 15, 1950, through December 31, 1953.

2. The incidence of 2 per cent proven malignancies is cited with a breakdown of these lesions according to site.

3. Cytologic diagnosis as a screening method for cancer, particularly of the cervix, is discussed and its accuracy is evaluated.

4. It is emphasized that fifty-two cases of carcinoma of the cervix were not suspected on careful clinical inspection but were diagnosed by smear examination and later confirmed by biopsy.

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The Volunteer—Heart and Soul of the ACS

By Mrs. Waldorf T. Kirk

UNDER the sign of the Cancer Sword of Hope, symbol of the crusading program of the American Cancer Society, men and women everywhere are carrying on the fight to prevent unnecessary deaths.

Doctors, lawyers, scientists, businessmen, career women, housewives, teachers, pupils—volunteers from every walk of life, old and young, skilled and unskilled, are fighting the American Cancer Society's three-front war on cancer.

In the Society's two divisions in Michigan, the Southeastern Michigan Division, which covers Wayne, Oakland and Macomb Counties, and the Michigan Division, serving the rest of the state, thousands of volunteers are striking back at cancer in an endless number of ways.

In 1913, a handful of determined physicians organized the American Society for the Control of Cancer, as it was then called. These were the Society's first volunteers, working to gain recognition of cancer as a major health problem, acquainting the general practitioner with the latest developments in cancer diagnosis and treatment, encouraging the establishment of cancer clinics, and other detection and diagnostic facilities. They provided inspiration to the countless thousands of others who followed.

Shortly after its organization, the Society realized that the co-operation of lay people was needed to spread the message of hope about cancer. So they enlisted the help of the women, who launched into an impressive educational crusade to break down prejudice, fear and pessimism, and spread facts about the disease that could save lives.

Today the work of this vast army of volunteers has grown to include every type of educational activity to spread the cancer facts. Its service program eases suffering, and provides comfort to fellow humans in sickness and distress. Through its fund-raising activities, the Society is able to support its ever-growing program of research, education and service. The national organization and each of its sixty divisions are governed by Boards of Directors, all volunteer, made up of distinguished doctors and lay people.

Since the public has come to accept the American Cancer Society as the leading agency in the field of cancer control, those who become involved with cancer look to the Society for help in solving the multifold problems which cancer creates.

Of special significance, therefore, is the information service provided in all organized units of the Society. Sometimes unit offices are set up. More often, the unit chairman has donated her home as the cancer headquarters for her community. Here the ACS makes the first contact with the general public, usually in the form of a worried individual seeking advice and help in one or more of the problems which cancer presents. The information service is, for the most part, conducted by volunteers, properly screened, trained and supervised. They form the nucleus for the Society's lay service projects. The donation of volunteer time and effort, of gifts and service, under professional guidance and training, helps in carrying at least part of the financial burden of the cancer patient being treated at home, sometimes hastens his recovery and at least eases his terminal days.

Volunteers are performing other important services for cancer patients and their families. In the Michigan counties of Wayne, Oakland, and Macomb last year, a total of 1,200,000 cancer dressings were made and distributed free of charge by volunteers. It has been estimated that these dressings represented, in savings to the average home patient, around $40 to $50 monthly.

Almost every ACS Unit stocks and maintains cancer loan closets for patients in their own communities. The service provides such items as hospital beds, wheel chairs, bedside feeding tables, bedding, bed pans, lamps, and other sickroom supplies and equipment. Larger items are furnished on a loan basis, for as long as the patient has need for them. Smaller supplies, such as vaseline, gauze, adhesive tape, etc., are given away.

Other volunteers serve as clinical aides smoothing the way for the doctor and the nurse by registering patients and taking their medical histories, and other small tasks which do not require professional skills. The Yates Memorial Clinic, sponsored by the Southeastern Michigan Division of the ACS, receives considerable help from volunteer aides.

Others transport patients to and from treatment

Mrs. Kirk is Chairman of Volunteer Activities and a vice-president of the Southeastern Michigan Division, American Cancer Society.

centers; some make friendly visits to the home, bringing cheer to the patients and some relief to the family burdened with his care.

While volunteers in the service program bring comfort and aid to those who have already been stricken with cancer, others in the educational program are saving many thousands from the disease by teaching the important facts about cancer. Volunteer speakers' bureaus include doctors, lawyers, housewives and business people who devote many afternoons and evenings to visiting factories, clubs, churches—in short, any place where people gather, to tell them about the disease, and show the Society's excellent cancer films.

Volunteer office aides address and mail literature, pack and mail posters, keep records. Others set up and staff exhibits and help raise funds to finance the Society's cancer control program.

At the unique Detroit Cancer Center at 4811 John R, home of the Southeastern Michigan Division, volunteers may be seen daily working with staff members on many phases of the division's activities. Volunteer guides conduct tours through the building, which also houses the Detroit Institute of Cancer Research, the Yates Memorial Clinic, and the Michigan Tumor Registry.

One of the most remarkable studies ever planned is now being carried on by several thousand volunteers in the entire state of Michigan. Volunteers have collected the smoking histories of more than 36,000 white men between the ages of fifty and sixty-nine, and are following these men closely. The project, originally planned to continue over five years, may be completed sooner than expected because of the excellent performance of the volunteer researchers. Much will depend on the results of this year's follow-up.

"Questioning such a large number of men at the outset of the study (204,547 men, nationally) was a remarkable feat in itself, but what was most gratifying was the high quality of work," Dr. E. Cuyler Hammond of New York, national director of the study, said. "A certain number of errors are to be expected on such a large scale project, but in this instance 97 per cent of the questionnaires were usable, and 90 per cent were perfect. It is doubtful whether paid, professional interviewers would have done as well," he said.

So, the volunteers are truly the heart and soul of this great organization dedicated to the control of cancer. Without their unremitting efforts, often in tasks with no glamour and much frustration, we could not have made progress. Without their continued leadership, the future would not look so hopeful.

THE DECISIVE BATTLE AWAITS ALL AMERICANS

Of the 25,030,000 participants in all American wars, 19,288,318 are living veterans! More than 4,500,000 Americans have served in the Korean war, and more than 1,483,000 have become veterans of that war by death or discharge.

One in eight of all Americans today is a veteran and certainly somehow related to five or six of the remaining citizens. Americans are then a nation of veterans, of whom only a vanishing ten per cent have not as yet been called upon to serve or to wait and work for someone who is serving.

With each passing month the induction totals lengthen and the age of those called falls lower. Today the registering young man has but six months assured to him as a civilian from his 18th birthday, and his draft board less than another six months in which to call him.

Surely all this is pertinent to any reflection upon the problem of waging a decisive conclusion to the protracted and so far inconclusive struggle in Korea. Already the first of the sons of Second War veterans are being uniformed, and many of these have grandfathers who served in the First World War.

What problem confronting civilization can compare, for challenge, with that of making such a waste of productive years no longer necessary? What greater challenge to the century than to end this waste of human capabilities?—Editorial, *B. C. Evening News,* March 29, 1953.

The Role of the General Practitioner in the Cancer Control Program

By J. S. DeTar, M.D.
Milan, Michigan

ALTHOUGH present mortality figures indicate that the annual death rate from cancer is about 200,000 persons per year in the United States, and is increasing about 3 per cent a year, there are indications that the correct figure is much higher. Dr. P. E. Steiner, President of the American Association for Cancer Research, concludes from his studies that errors in diagnosis and incorrect reporting constitute an additional 20 per cent mortality. This would bring the correct figure for cancer mortality to about a quarter of a million annually.

The Family Physician's Index of Cancer Suspicion

Correlation of this figure in terms of the general practice of medicine would be interesting. There are slightly over 200,000 Doctors of Medicine in the United States. 47 per cent of these doctors do general practice. This includes 73,000 who do general practice exclusively, and 23,000 who practice general medicine with a major interest in some special branch of practice.

It would be to the medical and economic advantage of every one of the 160,000,000 people in the United States if each had a personal physician —a family physician. If this were the case, the average case load would be 1,600 persons per family doctor. Making generous allowance for those who do not have a family medical counsellor, we might compromise on a figure of about 1000 persons per general practitioner. With 250,000 cancer deaths annually, and with 100,000 family physicians caring for these victims, simple arithmetic indicates that the average general physician treats not more than 2.5 patients annually who are dying of cancer.

Consider this figure: 2.5 cancer deaths a year. It constitutes about one-seventh of the average physicians' deaths. Deaths in the practice of medicine occur along with births, and colds, and accidents, and headaches. When one considers that the potential cancer victim may seek his initial examination at the same time that the family physician is involved with problems of delivering babies, treating accident victims, giving immunizations and wrestling with psycho-somatic problems, it is not difficult to appreciate that the index of cancer suspicion on the part of the doctor could conceivably remain at a sub-ideal level.

This is of course inexcusable. However, we should face facts, and we should face them in a forthright manner. Cancer consciousness has not yet reached its zenith, with either patients or physicians. In a recent survey in Philadelphia of cases receiving late treatment for cancer of the cervix it was discovered that 50 per cent of the delay was due to failure to make a pelvic examination on the initial visit. Certainly the index of cancer suspicion was not high in those neglected cases.

Furthermore, it was found by Dr. B. F. Boyd in a study of the causes of death from cancer among physicians during the past ten years, that doctors themselves report for treatment actually later in the course of the disease than cancer victims in the general population.

These statements are a bit shocking, but they are true. They simply point to the necessity for continuous accent on the cancer problem. This continuous accent is necessary among the 100,000 family physicians who serve as the first line of defense against this disease. The Cancer Control Committees of the National, State, and County Medical Societies are performing yeoman service in this campaign of continuous physician education. The role of the general physician in the cancer control problem is very similar to that of the soldier who is a member of the squad or platoon assigned to the perimeter defense in a combat zone. The enemy's likelihood of success is entirely dependent on his ability to get through the outpost undetected. The success of the defense lies in an early detection and prompt countermeasures. Early detection must take place in the family physician's office. The countermeasures are many.

What Is the General Physician's Field in Detection?

Specifically, what can the family physician do in early detection? What assistance must he have?

The story of the symptoms told to the doctor by the patient—the history—is of paramount importance. The doctor's cancer suspicion is immediately aroused by a story of weight loss, nausea, loss of appetite, weakness, simple vomiting, difficulty in swallowing, continuing indigestion, recently developed change in bowel habits, unac-

countable cough, blood from any body aperture, or any unusual discharge. The family physician needs only his eyes, his hands, a few simple instruments, and an alert cancer consciousness in order to detect the symptoms of most early cancer.

Cancer of the nose can be detected with the aid of a head mirror and a nasal speculum. Cancer of the mouth can be detected with a tongue blade and a good light. Cancer of the larynx can be detected with a laryngeal mirror, a head mirror, a good light, and a piece of gauze to hold the tongue. Early detection will save 90 per cent of cases. Symptoms are easily recognized. Cancer of the prostate can be detected by examination so simple that it is a routine part of every periodic health examination in the male. Papanicolaou stains will assist in suspicious cases.

Cancer of the cervix can be detected with a speculum, a light, a bottle of iodine solution, and a Papanicolaou stained slide. Laboratories are available to physicians in any locality reached by the United States mails. Every general physician is able to remove tissue from suspicious lesions of the cervix with simple punch forceps.

Cancer of the rectum and colon are detectable by examination which can be done in any general physician's office without special tables or expensive equipment. Seventy per cent of all such cancers may be detected without x-ray examinations. Early diagnosis can result in a survival rate of over 50 per cent.

Cancer of the skin can be verified by examination of a biopsy specimen which every general physician in the country is equipped to remove in his office.

All these procedures can be done by the family physician without assistance in his office. All that is needed is education of the patient sufficient to send him to his personal physician when early symptoms present themselves, and a high degree of cancer consciousness on the part of the physician.

When Does the General Physician Require Assistance?

No general physician, however, constitutes the final word in cancer detection. This is the job of the whole team. Positive findings by the pathologist require immediate co-operation of a specialist whenever removal or treatment of the lesion call for special techniques beyond the training and experience of the family doctor. The range of surgical skill and experience among general physicians is very wide, some performing a great deal of surgery, and others practically limiting their practices to internal medicine. The decision, as to whether surgical consultation and assistance are needed, is for the doctor to make. No ethical general physician attempts a surgical procedure for which he is not qualified by training and experience.

Few family physicians have special training in urology. Blood in the urine invariably calls for a special examination. The services of an x-ray specialist are indispensable and necessary in the diagnosis of all chest cancers and cancers of the intestinal tract. An x-ray examination is not the simple procedure many patients believe it to be; it is not just taking a "picture." Interpretation of x-ray films requires thorough knowledge of the case, and it is here that the family physician is able to render great service in providing the x-ray consultant with a complete description of the symptoms which necessitate the x-ray examination. In fact, this same close teamwork between family physician and specialist-consultant, is necessary in all fields, because such factors as family history, environmental influences, previous disease history and present symptoms are of great importance in arriving at a correct diagnosis. Cancer detection is truly a team effort. The family physician is the quarterback. He may call on any other member of the team to carry the ball, but he must himself take the initiative, call the plays, and accept responsibility for victory or defeat.

Progress in the Ranks of the General Physician

At this point, a few words regarding the place of the general physician are indicated. For a hundred years prior to the twentieth century, all physicians were general practitioners. During the past fifty years the trend toward special fields of training has been dominant. Ten years ago the great majority of senior students in medical schools planned to enter the specialties. The past five years have seen a reversal in this trend. Today, 50 to 60 per cent of senior medical students indicate an intention of doing general practice after internship. In addressing the senior class of the Medical School of the University of Michigan, I asked the students how many were considering general medical practice in their plans for the future; 90 per cent raised their hands. This is an encouraging sign. It is a response to public demand for more, and better trained family physicians. Six years

ago the American Academy of General Practice was organized for the purposes of maintaining high standards among general practitioners, of stimulating postgraduate medical education, and of attracting and training more medical students to be family physicians. Today over 17,000 family physicians hold membership in this new organization which requires that they show evidence of continuous postgraduate study in order to retain membership. Cancer detection is high on the list of subjects in all their postgraduate educational programs.

General physicians, however, in some localities, have difficulty in securing hospital appointments. Over 2500 physicians in New York City lack hospital staff membership, and over 800 in Detroit. As a result, these doctors suffer from lack of continuous professional stimulation and education which such association engenders. Although this condition is not common in smaller communities, it does prevail in most metropolitan areas. If the index of cancer detection alertness is to be kept at a high level, the family physician must not be relegated to a position of a mere sorter of patients. He must be an integral part of a hospital organization. Present evidence indicates that much progress is being made to correct this undesirable situation.

Periodic Health Examinations

One additional plank in the family physician's platform for cancer detection should be mentioned in passing. This is the periodic health examination. The American public is becoming increasingly conscious of the value of this procedure. This is particularly true in the preschool age, and after the age of forty. General physicians are spending a greater and greater percentage of their working hours in this phase of medical practice—a phase which is strictly preventive medicine in the field of private practice. These periodic examinations offer a golden opportunity for every family physician to search for the signs and symptoms of cancer, along with those of diabetes, heart disease, hypertension, the arthritides, and other degenerative conditions. Even the routine administration of immunizations to babies and small children affords the alert doctor this privilege in an age group which demonstrates malignancies second only to the incidence in the declining years. The Michigan State Medical Society is presently developing plans which should lead to a marked extension in the practice of periodic health appraisals—with the family physician's office the focal point in the program.

The Future of Cancer Control

I cannot close this discussion of the relationship of the general physician to cancer control without a word of appreciation to the Cancer Committee of the Michigan State Medical Society, and to the Michigan State Department of Health for the excellent, stimulating work they are doing for the family physicians throughout the State of Michigan through the medium of the *Cancer Bulletin*. Every issue of the *Bulletin* acts as a catylist to increase cancer alertness. It constitutes a ready, up-to-the-minute file for reference. It is a splendid stimulus to physician thinking in this all-important field.

Certainly, with this continuing education of the physicians of Michigan, and with the continuing work of the Michigan Branches of the American Cancer Society in the education of the consuming medical public, the progress of cancer control in Michigan will reach hitherto unattained heights.

REPORT OF CANCER PROGRESS

(Continued from Page 381)

The solution lies in attacking it on it broadest possible front—educating the public, keeping the doctor up to date, studying and supporting newer methods of detection, carrying on an integrated research program nationally planned, and in training the manpower for research in the future. For it, the American Cancer Society represents the greatest weapon to fight this battle.

So cancer control—through research, education and service—is a year in, year out job that must be tackled by each individual according to his particular talents. But it is a job that is paying off slowly but surely, and one day will bring about the end of the most vicious killer the world has known —Cancer.

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Basal Cell Epithelioma of the Anus

By P. C. Martineau, M.D., M.S.,
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IN 1923, Pennington,[20] first described a basal cell epithelioma of the anus, an entity that has since been recorded but eighteen times. The reports of these cases are summarized in Table I along with a case from Herman Kiefer Hospital.[1,3,6,8,13,14,18,19,20,21,22,23]

There is no symptom complex characteristic of anal basal cell epithelioma. The outstanding feature in the clinical history of most patients with this condition is one of chronic irritation. The reported duration of anal symptoms prior to admission in the cases listed in Table I ranged from six months to thirty years with two-thirds of the patients having symptoms from six months to six years.

The principal finding on physical examination was that of an anal mass. This was described in all nineteen cases. The mass was infiltrating in ten cases and polypoid in nine. Hemorrhoids were noted in eight patients.

Ulceration of the anal surface was noted only in three cases. Pain and tenderness were very unusual initial symptoms and for this reason the patient did not seek care until the lesion was advanced.

Eleven of the tumors were small and were apparently excised in an early stage of their growth. In this group there were no recurrences reported following definitive therapy; whereas, in those of the advanced group in which the outcome is recorded, all had recurrences of the tumor. Five such cases were reported with deaths presumably due to the anal cancer, but no autopsy reports were available. Because of the disastrous consequences of the unrecognized or untreated condition, this entity should be considered in the differential diagnosis of all anal masses, and a biopsy should be made whenever there is the slightest suspicion. The definitive diagnosis is dependent upon the histologically demonstrable basal cell structure of the tumor.

In a series of 951 proctologic cases, Tucker and Hellwig[22] found one third of their malignant lesions had been discovered by routine histologic examination of clinically benign lesions. They concluded that, more than in other regions, early malignant lesions of the anal canal may closely resemble harmless conditions.

Basal cell epithelioma of the anus, which has much better prognosis than epidermoid carcinoma of the anus, is unfortunately much less common. Buie and Brust[3] from a series of 61,000 proctoscopic examinations were able to find 2,939 malignant lesions. Of these, fifty-one were anal carcinomas including forty-six epidermoid carcinomas and three basal cell carcinomas. In a latter review, McQuarrie and Buie[18] studied 137 additional cases of malignant anal neoplasms of epidermal origin and were able to find only two cases of basal cell epithelioma. The patients cited in Table I ranged in age from forty-three to seventy-seven years with an average of 56.6 years. Forty-two per cent of the patients were from the sixth decade and 69 per cent were from the age period fifty to sixty-three years. The age distribution is similar to that of several large series of epidermoid carcinoma of the anus. Gabriel's[6] reported average age in fifty-five such patients was sixty-two. Buie and Brust's[3] was fifty-seven years in forty-six cases, and Keyes et al was fifty-seven in twenty-seven cases.

The sex distribution is also similar to that of anal epidermoid carcinoma with eleven men and eight women in the cases recorded in Table I as compared with twenty-five women and twenty-two men in Buie and Brust's[3] series.

Nine of the patients in the series reported in Table I were treated by local excision of the neoplasm followed by local irradiation. Three patients had colostomies with posterior anorectal resections. Two were treated by irradiation alone. One had an abdominoperineal resection. Another had local irradiation of the neoplasm and an inguinal dissection, and finally, one was treated with colostomy and local irradiation of the neoplasm followed by closure of the colostomy.

Because the lesion is slow to grow and to metastasize, most early lesions can be successfully treated by local excision with or without subsequent irradiation of the tumor site. Advanced lesions must be treated by radical procedures such

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TABLE I.

Author	Age	Sex	Duration of Symptoms Before Admission	Clinical Findings	Histopathology	Treatment	Outcome
1. Pennington 1923	53	M	About 6 years.	Pruritus, hemorrhoids and fissures. Small granular nodules.	Basal cell carcinoma.	Radium therapy.	Not reported.
2. Wallon, E. 1927	63	M	About 4 years.	Thick, friable, easily bleeding vegetations associated with hemorrhoids.	Basal cell epithelioma.	Colostomy, radium therapy, followed by closure of colostomy.	No recurrence noted at time of report 1 year later.
3. Rosser 1931	77	F	30 years.	Hemorrhoids, blood stained pus from anus. Indurated anal tumor. Inguinal glands involved.	Epithelioma, presumably basal cell.	Not reported.	Not reported.
4. Buie & Brust 1933	53	F	1 year.	Advanced annular lesion.	Basal cell epithelioma.	Colostomy; posterior resection, half of vagina removed. Local nodes removed. Radium.	Recurrence in 8 mos. Death 9 mos.
5. Buie & Brust 1933	53	F	30 years.	Hard node, size of orange, left groin, extensive mass anus.	Basal cell epithelioma.	Radium advised, went home without treatment.	Unknown.
6. Buie & Brust 1933	77	M	6 months.	Papillomatous mass 1x2x5 cm. involving anal margin.	Epithelioma, "basal cell."	None.	Died 11 days after prostatectomy for malignant tumor and uremia.
7. Guess 1935	52	M	"Hemorrhoids" 27 years. "Tumor" lyre.	2 cm. diameter ulceration with a hypertrophied papilla, the size of a pea.	Basal cell epithelioma.	Local excision, radon seeds.	No recurrence. Died of coronary occlusion 5 years postoperative.
8. Tucker & Helling 1938	43	M	2 years rectal bleeding. One week pain.	Infected anal ducts, Enlarged papillae, resembled a tumor. Plus int. and ext. hemorrhoids.	Basal cell carcinoma.	Local excision, roentogen therapy and radium.	No recurrence at 3 years.
9. Lawrence 1941	73	F	1 year. Growth in anus.	Advanced, hard, annular, fungating mass.	Basal cell carcinoma.	Colostomy and later posterior resection of anus and rectum.	Died 26 days. P.O. No autopsy.
10. Lawrence 1941	68	F	11 months. Protruding mass.	Hard, annular, fungating tumor mass 6 cm. in greatest surface diameter. Involving prostate and membraneous urethra.	Basal cell carcinoma.	Loop colostomy, followed 8 days later by posterior resection of anus and rectum.	Died 2½ years P.O. No autopsy.
11. Gabriel 1946	70	M	2 years.	Oval flat ulcer the size of the thumbnail, right anterior anal quadrant.	Rodent ulcer.	Local excision, by cutting diathermy.	No recurrence after 1 year.
12. Gabriel 1948	63	F	3 years.	Small, flat, raised papule, bluish pink in colour, about the size of a shilling.	Basal cell carcinoma.	Local excision by cutting diathermy.	Patient has remained well for more than 3 years.
13. Lott & Alexander 1949	62	F	Not reported. Complained of itching and irritation.	A small area of thickening, about 1 cm. in diameter, beneath the mucosa at 2 o'clock.	Basal cell carcinoma.	Local excision. Fulguration. Local irradiation (x-ray).	No recurrence after 6 months.
14. Bacon 1949	60	M	Not reported. Anal bleeding.	Anal lump.	Basal cell epithelioma.	Abdomino parineal resection.	Died 19 months following operation.
15. Bacon 1949	52	F	Not reported. Burning pain and itching.	Anal mass.	Basal cell epithelioma.	Roentgen therapy, inguinal dissection.	Died in 9 months. No autopsy.
16. McQuarrie & Buie 1950	50	M	Protruding hemorrhoids. 8 years duration.	Small int. and ext. hemorrhoids and an area of dermatitis on the right wall of the anal canal with a small, underlying undurated process.	Basal cell epithelioma.	Wide, local excision, radium therapy.	No recurrence after 2 years.
17. McQuarrie & Buie 1950	53	M	Anal trouble, 7 years duration.	Indurated ulcer 3x1.5 cm. at the posterior margin of the anus.	Basal cell epithelioma.	Wide, local excision and radium therapy.	Signs of recurrence after 1 year, patient refused further treatment.
18. Hall 1952	58	M	Not reported. Hemorrhoids and a "granuloma" to the left of the anal opening on admission.	A flat polyp of the skin 1. scm. in diameter, on section a well circumscribed, grey, gelatinoid mass.	Basal cell carcinoma of the skin (perranal) adenoid type.	Local excision.	No recurrence after 1½ years.
19. Martineau, Saini & Clermont 1953	62	M	5 years hemorrhoids 1 year prolapse mass.	A flat polyp of the mucosa of the right ant. quadrant of the anus, without ulceration.	Basal cell epithelioma.	Local excision. X-ray irradiation to site.	No recurrence at time of report.

as posterior anorectal or abdominoperineal resections together with resection of regional lymph nodes and extensive local irradiation.

The following case is reported because it illustrates the value of routine histologic examination of all apparently inocuous anal lesions:

Report of Case

G. Z., a sixty-two-year-old white salesman, was transferred from the William H. Maybury Sanatorium to Herman Kiefer Hospital on February 11, 1953, for the surgical repair of prolapsed hemorrhoids. The hemorrhoids had been noticed by the patient for the past five years with additional symptoms of constipation, slight bleeding and anal discomfort. The patients had had pulmonary tuberculosis since 1945, and on the present ad-

mission, was classified as having chronic bilateral active far-advanced disease. About three years ago, the hemorrhoids began to prolapse with each bowel movement but could be replaced until about a year ago. At that time, the patient was started on streptomycin and para aminosalicylic acid and soon noted increased hemorrhoidal irritation and discomfort. Recently, the blood streaking of the stool had increased and there had been a constant yellowish discharge from the prolapsed hemorrhoid. There had been no severe pain, no constipation and no diarrhea in the last six months.

A liver biopsy performed at another hospital in 1945 showed a moderate degree of portal cirrhosis and an enlarged liver was noted. The patient had a long record of chronic alcoholism, but for the past three years he had been compelled to abstain.

Physical Examination.—Physical Examination revealed a very obese plethoric aged man who was mildly dyspneic in the recumbent position. The liver was papable two finger breadths below the right costal margin. The edge was smooth and firm. Numerous varicose veins were noted in both legs with atrophy and deep pigmentation of the skin on the tibial surfaces.

On February 25, 1953, he was examined in the rectal clinic. A prolapsed crescent-shaped mass measuring 2x2x5 cm. involving about two-thirds of the circumference of the anus was found on the right. The center of the mass was slightly indurated but no ulcer was present. The mass could be reduced into the rectum but it immediately prolapsed. It was not tender. Extensive internal hemorrhoids were noted during sigmoidoscopic examination but no other abnormalities were seen. No palpable lymph glands were found.

Laboratory studies showed no anemia nor leukocytosis.

On May 29, 1953, following a comprehensive sigmoidoscopy under low spinal anaesthesia, a hemorrhoidectomy was performed by Whitehead's technique.

The mass, along with the adjacent right anterior and posterior hemorrhoids, was dissected from the underlying tissue. The hemorrhoids were individually ligated and cut free. The left lateral hemorrhoid was similarly excised, and the anal mucosa was then sutured down to the skin.

The patient's postoperative course has been good. No sign of recurrence has appeared and the patient is being continued on antibiotic therapy for his pulmonary tuberculosis. Roentgen therapy will be given locally to the site of surgical excision of the anal mass.

Pathological Report.—Grossly, the specimen consists of two large pieces of redundant anal mucosa, the larger measuring about 4x2x2 cm. Large dilated, blood-filled veins are seen in both pieces beneath the mucosal surface. The large piece is surmounted by a flattened polypoid mass with a broad pedicle. This measures about 1.5 cm. in diameter and rises about 0.3 cm. above the surrounding mucosal surface. There is no gross evidence of ulceration. On cut section, the polypoid mass extends about 0.2 cm. into the submucosa and is composed of a homogeneous firm light tan tissue.



Fig. 1. Basal cell epithelioma of anus, cross section of gross specimen. ×4.8

A large number of microscopic sections were made from all portions of the tumor. These showed bridges of neoplastic "basal cells" joining the small irregular subepidermal tumor masses with the basal layer of the epidermis and also with similarly appearing cells in the hair follicles and in the sebaceous glands. No involvement of the sudoriferous glands was found. The tumor cells were uniformly spindle-shaped with very little variation in size and with scanty, somewhat basophilic cytoplasm. The nuclei were ovular in shape, and moderately dark staining with hematoxylon.

The nuclear chromatin presented a fine rather uniform granularity. Few mitotic figures were seen. The "basal cells" at the periphery of the rounded masses was arranged in a palisade. The tumor cells extend about 0.2 cm. in irregular rounded masses into the submucosa. Over the surface of the polyp the epidermis is eroded and the tumor cells exposed. The tumor cells extend a few millimeters into the columnar epithelium above the mucocutaneous junction. The supporting connective tissue was infiltrated with a few lymphocytes and plasma cells. Large varicose veins were noted in sections of both pieces of tissue beneath the anal mucosa. These veins were not invaded by the tumor.

Discussion

We have preferred to retain the name basal cell epithelioma for this neoplasm because this is the name under which most of these tumors are found in the literature, and because this is the term most familiar to the majority of clinicians who would be treating cases of this type.

Theories as to the cellular origin of basal cell epithelioma have been presented by Krompecher



Fig. 2. Photomicrograph of anal skin showing basal cell epithelioma apparently arising from stratum germinativm. ×90



Fig. 3. Photomicrograph of anal skin showing basal cell epithelioma arising from a hair matrix. ×14



Fig. 4. Photomicrograph of hair matrix with basal cell epithelioma growing from it. ×90

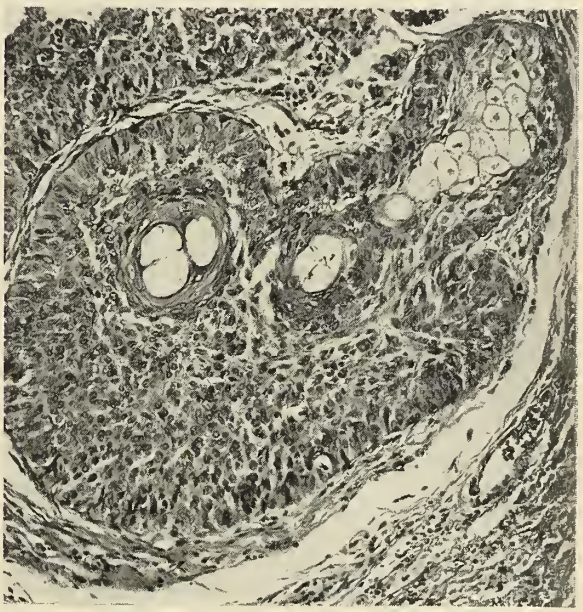


Fig. 5. Photomicrograph of basal cell epithelioma involving sebaceous gland. ×135

(basal cells),[11,12] Mallory (hair matrix),[16] Ewing (basal cells),[4] Haythorn (hair matrix),[10] Blasdel (seborrheic patches),[2] MacFarland et al (embryonal nests),[15] Foot (skin adnexa),[5] Nicolas and Favre (hair sheath),[19] Gates, Warren and Warvi (sebaceous and sweat glands),[7] and others.

The various concepts of the cellular origin of "basal cell" tumors has been comprehensively reviewed by Foot,[5] who, from a histologic study of well over 200 early lesions, stated that this neoplasm originated in distorted primordia of dermal adnexa rather than from ordinary epidermal basal cells. He has coined the term "adnexal carcinoma of the skin" for these tumors and distinguishes three main types: (1) pilar type, (2) sudoriparous glandular type, and (3) basal-celled type. The tumor observed by us is presented as being of the same histologic structure as that of primordial



Fig. 6. Photomicrograph of anal skin near mucocutaneous junction showing neoplastic "basal cells" invading the columnar and glandular mucosa. ×90

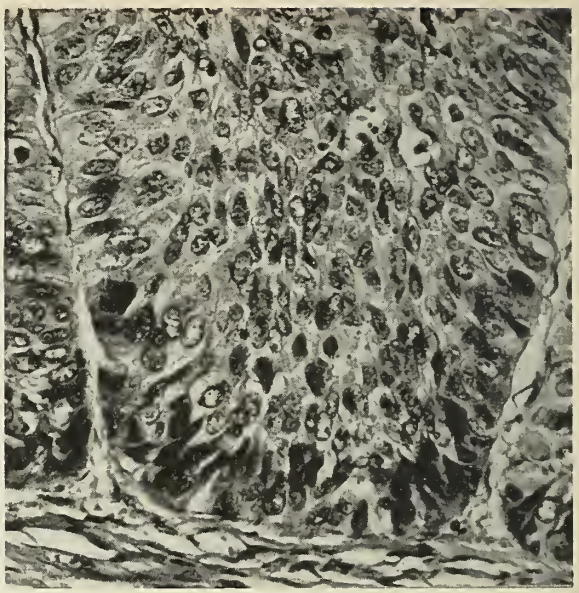


Fig. 7. Photomicrograph showing palisading of basal cells at the periphery of the tumor. ×220

pilar type of Foot. It is our opinion that the "basal cell" epithelioma type one of McCarthy,[17] the "hair matrix" carcinoma of Mallory and the pilar type of "adnexal" carcinoma of the skin of Foot can, for all practical purposes, be considered a single entity—a slowly growing carcinoma of characteristic structure and disputed origin with little tendency to metastasize until the primary lesion is very large.

Not included in the collection of basal cell epitheliomas of the anus presented in Table I was the report of the sixty-two-year-old woman reported by Gates, Warren and Warvi[7] with a hydradenoid carcinoma of the anus containing foci of "hair matrix" carcinoma, and ten cases of basal-squamous cell epithelioma reported by McQuarrie and Buie.[18] The reference by Clemons[8] to a description of a case of rodent ulcer of the anus by Dr. Donald, in the *Edinburgh Medical Journal,* April, 1884, was found to be false.

Summary

Basal cell epithelioma of the anus is a rare neoplasm with a clinical history and physical appearance similar to many benign anal lesions. Successful treatment depends upon early recognition by biopsy and upon adequate excision of the lesion while it is small and localized in the anus.

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Methods for the Earlier Diagnosis of Gastric Cancer

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GASTRIC CANCER is the most common and insidious of all malignant lesions. In the neighborhood of one fourth to one third of all deaths due to malignancy result from cancer of the stomach. It has been estimated that 500,000 of our population are afflicted with this disease. Approximately 40,000 of these individuals die every year. These alarming figures are further emphasized by this statement of Livingston and Pack[8] made in 1939: "There are more deaths from carcinoma of the stomach than from all malignant tumors of the lip, tongue, cheek, tonsil, pharnyx, larynx, salivary glands, thyroid, male and female breasts, ovary, uterine cervix, and corpus uteri combined." The challenge to medicine in these stark facts is obvious.

This discourse is based on three premises. The first is that carcinoma of the stomach is a curable disease, notwithstanding the gloom and discouragement that have been associated with its consideration and management in the past. The second premise is that in spite of the modern advancement in various fields of therapy the only known cure and the only significant palliation for cancer of the stomach is radical surgical extirpation of the lesion. The important third premise is that despite the wide application and safety of modern surgery of the stomach the cure rate is still dependent upon the early diagnosis of the relatively localized gastric cancer. It is a rarity that the patient with advanced cancer is reclaimed from his malady. The further salvage of patients with gastric cancer from the present mortality and morbidity prospects is dependent upon earlier diagnosis and the prompt application of proper surgical therapy.

A New Philosophy

Meeting the challenge of this disease requires that all physicians assume a new philosophy, cast aside their pessimism regarding gastric cancer and substitute confidence in its curability, alertness for its early manifestations, and speed in providing skillful surgery when the disease is recognized. The gloom of the past is brightened by such statistics as those of Berkson, Walters, Grey, and Priestly[3] who have found in a recent review of 9,620 cases of gastric cancer treated by resection in the period from 1907 through 1948 that 50 per cent without known metastases at the time of operation were alive after five years. Another 20 per cent who did have known metastases at the time of operation survived five years. In contrast, only 1 per cent who did not undergo resection, either because of inoperability or refusal, lived five years. Compare the latter with their resected group, both with and without known metastases in which 32 per cent lived five years. As further evidence that this disease is giving in to the surgical attack against it, Comfort[4] sites from the experience of the same series of cases in the comparative ten-year periods 1907 through 1916 and 1940 through 1949 that the exploratory rate has increased 33 per cent (from 60 per cent to 80 per cent), the resectability rate has increased about 50 per cent (from 37 per cent to 55 per cent), and the five-year survival rate has increased about 20 per cent (from 5 per cent to 14 per cent). At the same time the hospital mortality has fallen from 16 per cent to 8 per cent. It is believed that future analysis of current experiences would show improvement on these figures. Numerous other recent reports give support to the contention that gastric cancer is curable by modern surgical therapy.

Some credit for the more favorable prognosis in this disease must be attributed to the earlier detection of the malignancy in a relatively localized stage. At the same time there can be no pride in the fact that our present methods of detecting gastric carcinoma still result in a large number of the cases reaching surgeons in a far-advanced, inoperable, and hopeless state. All too frequent are cases of procrastination and unnecessary delay on the part of the patient in seeking consultation and on the part of the profession in properly investigating symptoms and applying surgical therapy. As improvements in surgical technique and the reduction of operative mortality reach their plateau of effectiveness, the fundamental problem in extending curability becomes the recognition of the disease early while the neoplasm is confined only to the stomach.

Recognition of Its Manifestations

It is unfortunate that there is no symptom complex by which early carcinoma of the stomach

can be recognized. This absence of warning accounts in a large measure for the number of inoperable cases seen. It is a peculiar ability of hollow viscera, and especially the stomach, to accommodate themselves to local encroachment on their functions without manifestation of symptoms. A foreign body, a bezoar, a large polyp, or a carcinoma may remain in the stomach for a long period before warning the patient. Wangensteen[13] has pointed out that several well-known surgeons, such keen observers as W. J. Mayo, Wilkie, Mikulicz, and Kirschner failed to recognize early the symptoms in themselves and eventually all died of the disease.

Lectures to medical students and textbook descriptions of the symptomatology of cancer of the stomach concern the well-established and advanced state of the disease which is usually hopeless from the standpoint of cure. The disease must be recognized long before symptoms and physical signs become prominent. Physicians must alert themselves to the very early, meager clues in the history which will prompt a more detailed investigative study. Importance should be attached to vague, indefinite symptoms. Insidious changes in daily activity and dietary habits in any individual beyond the age of forty may be significant. Detailed history taking brings out points that the patient himself would think unimportant and would not mention. The refusal of second helpings at meals, skipping of desserts, a new distaste for certain foods, especially meats, the gradual dislike of carbonated drinks because they are believed responsible for belching, a loose fitting of the clothes or taking up of the belt one or two notches, gradual, unexplained weight loss, calling it "quits" on the first nine holes of golf when eighteen or twenty-seven would normally be easy, a new desire to take a nap in the afternoon or retire early at night—all of these are points in the history that may be of great importance.

A physical examination should never be omitted in the evaluation of any patient, but it must be admitted that one cannot depend upon physical findings for an early diagnosis of carcinoma of the stomach. When a mass is palpable or anemia and malnutrition are evident the disease is well advanced. In the search for curable carcinoma of the stomach one must look for it in the relatively uncomplaining and physically normal individual.

Laboratory Aids

Of the routine laboratory examinations that are available the only ones that are of much value in the early diagnosis of gastric cancer are the stool examination for occult blood and the hemoglobin determination. Practically all carcinomas of the stomach will show a persistent 4 plus occult blood in the stool. Multiple stool examinations, preferably while on a meat-free diet, should be carried out. A positive test is not diagnostic but only confirmatory and warrants further investigation. Low hemoglobin values may be found in early carcinoma of the stomach but they are much more common in advanced stages of the disease. Both of these examinations can easily and accurately be done in the physician's office and a positive test for either should have explanation by a more intensive investigation.

Value of Gastric Analysis

Carcinoma of the stomach frequently is accompanied by an achlorhydria or hypochlorhydria, and this fact is of aid in prophesying the development or diagnosing the presence of gastric cancer. Comfort, Kelsey, and Berkson[5] studied the gastric secretory activity in 277 patients in whom gastric analysis had been done at a mean interval of 11.2 years before a diagnosis of carcinoma of the stomach was made. They concluded that a mean gastric secretory activity is characteristically subnormal in gastric precancerous patients during all intervals before diagnosis and as long as twenty to twenty-five years before the disease appears. They felt that the process responsible for this change was a progressive atrophy of the gastric mucous membrane which had been occurring since early life. Gastric analysis is not diagnostic but it should be done routinely in any patient suspected of having carcinoma of the stomach. This examination may materially aid in differentiating the benign gastric ulcer from an ulcerating malignancy, for in contrast to the former the latter is usually accompanied by achlorhydria or hypochlorhydria.

Gastric analysis has been investigated for its value as a diagnostic aid in detecting early gastric cancer and for mass screening prior to roentgen examination. State, Gaviser, Hubbard, and Wangensteen[12] have reported their results on a study of a group of patients who were considered to be potential harborers of silent gastric cancer. All of these individuals were over the age of fifty and were without gastric complaints. They were stud-

ied because they had (1) achlorhydria or hypochlorhydria; (2) pernicious anemia; (3) were relatives of patients with gastric cancer; (4) had unexpected hemoglobin levels below 11.0 Gm., or (5) had occult blood in the stools. All of these patients submitted to fractional gastric analyses with histamine. There were found 569 patients who were achlorhydric after two doses of histamine and 309 who were achlorhydric after a single dose of histamine. Another 203 patients were found to be hypochlorhydric. To investigate these abnormalities roentgen examinations were made on 1,832 patients. Seven silent carcinomas of the stomach and thirty-two gastric polyps were found. Two gastric carcinomas were missed through organizational errors and one through misinterpretation of the x-rays. These workers believe that there is merit in the use of gastric analysis as a screening procedure and that it is both possible and practical to survey large groups by this method to obtain clues as to the presence of early cancer of the stomach.

Radiography in Early Diagnosis

The greatest aid in the diagnosis of carcinoma of the stomach is radiography. Much argument rages concerning the merits and superiority of the x-ray over the flexible gastroscope or the gastroscope over the x-ray. Such controversy has little to commend it for each of these tools of diagnosis have their respective places in our armamentarium and are really only as good as the experience and skill of the men who use them. By judicious use of both methods greater diagnostic accuracy can be obtained than by the use of either method alone. X-ray is preferable to gastroscopy as a routine diagnostic procedure. It has the advantage that it can be employed with greater rapidity, comfort, and safety to the patient and it has fewer contraindications. Furthermore, it allows examination of the esophagus and the duodenum and remainder of the small bowel as well as the stomach. The fluoroscopic examination is perhaps of most importance because the extent and invasion of tumor can best be determined by alterations in motility and rugal pattern which are not apparent on the roentgenograms.

As an aid in the early diagnosis of carcinoma of the stomach the x-ray has been disappointing. The early mucosal lesions or superficial spreading carcinomas will frequently be missed by the x-ray. Very few small carcinomas can be visualized unless they are along the lesser curvature in or near the antrum. The differentiation of the benign from the malignant ulcer continues to be a difficult problem for the radiologist. Radiography is of least value in discovering lesions of the cardia and of the anterior and posterior walls and greater curvature of the upper one third of the stomach. Credit must be given to the radiologist in his great accuracy in detecting gastric disease, for he uncommonly misses an abnormal stomach, but the naming of the disease which exists and whether or not it is benign or malignant is less accurate.

Mass radiography has been attempted by several investigators but the results achieved hardly justify the efforts expended. In 1944 St. John, Swenson, and Harvey[11] reported subjecting 2,413 patients over fifty years of age to brief fluoroscopic surveys of the stomach. Only two silent gastric carcinomas and one lymphosarcoma were found, an incidence of unsuspected gastric malignancy of 1.24/1,000 examinations. In 1945 Dailey and Miller[7] did barium x-ray examinations of the stomach on 500 normal men who were over the age of forty-five and free of digestive complaints. Three benign lesions were found, a benign gastric ulcer, a polyp, and an antral gastritis. Intensive and expensive examinations of this type to find so little would seem to render such an approach to the problem impractical. If only annual upper gastrointestinal x-rays (rather than quarterly as some have recommended) were to be done on all persons over the age of fifty, the x-ray facilities and the personnel necessary to carry out the studies would be tremendous.

An answer to the problems associated with mass roentgen examinations of the stomach may be found in the photofluorographic studies which are being carried out in some institutions using the Schmidt-Helm camera which has an extremely fast lens allowing the taking on microfilm of serial exposures of the stomach as the patient swallows contrast media. Roach, Sloan, and Morgan[10] have reported on 10,000 photofluorographic gastrointestinal examinations performed on dispensary patients over the age of 40 at the Johns Hopkins Hospital. They have found 90.7 per cent of their examinations satisfactory for diagnostic interpretation. Of the 10,000 examinations 1,209 had the standard gastrointestinal series and only seventeen were interpreted as normal by the miniature examination, only to have pathology revealed by the standard study. False positives comprised 25.4

per cent of the 1,209 studied, but this represented only 3.3 per cent of the 10,000 photofluorographic examinations. Of the total studied, 0.2 per cent (1,476) were found to have malignant disease. These observers report that the photofluorographic examination of the stomach is a simple procedure, accurate, inexpensive, and adaptable to mass screening. It holds great promise for uncovering silent cancer.

Role of the Gastroscopist

The gastroscope as a diagnostic tool has had difficulty in establishing its reputation for reliability. It has definite but limited use. Where the x-ray has difficulty in visualizing lesions high on the greater curvature the flexible gastroscope sees this area with ease. It is of further value when x-rays are not conclusive in diagnosing lesions in other areas of the stomach and where x-ray and clinical evaluation are at variance. It is of little value in surveying lesions close to the pylorus on the lesser curvature of the antrum, high on the lesser curvature of the body of the stomach, and high in the fundus. It is of considerable value in the differentiation of gastric ulcer from early ulcerating malignancy. Gastroscopic examination is definitely indicated in all cases of persistent or recurrent gastric complaints with negative x-rays. It is of value in following proven cases of gastric ulcer, atrophic gastritis, pernicious anemia, and achlorhydria. Its use is indicated where a definite diagnosis cannot be made by x-ray but a suspicious lesion is present. The source of greatest error in the diagnosis of carcinoma of the stomach is in the differentiation of this lesion and severe hypertrophic gastritis. The x-ray experiences this difficulty too. As a procedure for mass examinations of the population gastroscopy seems impractical. The procedure could be much more helpful and of greater importance in the earlier diagnosis of gastric cancer if it were more vigorously used by clinicians. LaDue, Murison, McNeer, and Pack[6] found that the use of the gastroscope as an adjunct to x-ray examinations raised the incidence of positive preoperative diagnosis 9.5 per cent in 305 patients studied. Benedict[2] using his gastroscope which permits biopsy of lesions in the stomach has reported that this procedure is simple, safe, and accurate in the diagnosis of suspicious gastric lesions. Experience with such a method is still limited, but it holds considerable promise.

Papanicolaou's cytologic smear methods for diagnosis of malignancy have been used in the study of desquamated cells in gastric contents. It is a procedure that can be used in conjunction with the gastric analysis as a screening method, but it is no more valuable than the experience of the pathologist who gives the opinion on the cytology. One of the recognized weaknesses in the technique has been the difficulty in obtaining with frequency cells from the lesion in the stomach. Panico, Papanicolaou, and Cooper[9] have reported increased accuracy with the use of an abrasive balloon, to pick up cells from the gastric wall, and Ayre and Oren[1] have had significant success with a tube- directed stomach brush which has a similar function. These methods have the potential of being adaptable as an important office procedure. More study and observation is necessary and wider use is encouraged to provide experience comparable to other methods of study.

Summary

If further advances are to be made in the cure of gastric cancer all physicians must assume a modern, positive philosophy toward the disease, recognizing in substance that the disease is curable, that the only known therapy is surgical extirpation of the cancer, and that the diagnosis can and must be made earlier. The profession must be especially attentive to patients with known atrophic gastritis, pernicious anemia, achlorhydria, and hypochlorhydria. Patients who have unexplained secondary anemias should be reasonably investigated not merely treated symptomatically. A positive family history of gastric carcinoma should be a warning to close relatives and their physicians to be on the alert for early detection of this disease. The public must be made more conscious of the condition and its early warning symptoms. Using the diagnostic tools suggested here physicians can give accurate study to individuals seeking consultation for minimal gastric complaints. For the individual in which the disease is recognized there must be application of competent surgical therapy without delay. There must be willingness on the part of the surgeon to operate on suspicion of malignancy even though unquestioned diagnostic evidence of cancer is lacking. Knowing the formidableness of his foe and the overwhelming odds that he has faced in the past, the surgeon nevertheless must be satisfied with nothing short of an all out, courageous effort to eradicate the disease.

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The Differential Diagnosis of Intrathoracic Malignancy

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RECENT advances in thoracic surgery have led to increased interest in the early diagnosis and treatment of intrathoracic malignancy. Early diagnosis has become more frequent due to:

1. Extensive mass chest x-ray survey programs.
2. More frequent use of bronchoscopy.
3. The relative safety of exploratory thoracotomy.

During this era of increased interest and availability of diagnostic and treatment facilities there has also been an apparent increase in the incidence of intrathoracic malignancy. The burning question of the day is "Does cigarette smoking cause cancer of the lung?" This question certainly should be resolved.

The Mass Chest X-Ray Survey

By means of the mass chest x-ray survey numerous intrathoracic lesions in addition to tuberculosis are being revealed. Fortunately the chest x-ray will reveal disease in the lungs at an early stage and should be used routinely and frequently. A more widespread adoption of a policy of routine admission chest x-rays by the general hospitals is urgently indicated.

Bronchoscopy

Bronchoscopic examination frequently reveals disease in the major or secondary bronchi which is not demonstrable in any other way. Biopsies of these intrabronchial lesions under direct vision may be taken. The use of the right angle telescope allows us to see into the segmental bronchi. Frequently it is necessary to outline the bronchial tree with radiopaque material to rule out or establish bronchiectasis in the differential diagnosis.

Exploratory Thoracotomy

An abnormal density in the chest x-ray requires thorough investigation. Frequently the only way that the lesion can definitely be diagnosed is by exploratory thoracotomy and frozen section examination of the lesion. Prolonged observation of a doubtful lesion may be fatal.

If carcinoma of the lung can be detected before it has greatly extended or metastasized it may be removed with resulting cure. Unfortunately carcinoma of the lung, early in its course, usually does not give rise to sufficient symptoms to provoke a thorough examination.

The intrabronchial carcinomas grow quietly in one of the main stem bronchi or in one of the secondary bronchi and usually produces no symptoms until the bronchus is occluded. With occlusion of the bronchus the lung distal to it becomes atelectatic and suppuration in the atelectatic lung supervenes.

Case Reports

A few of the problems which we have encountered in the diagnosis of intrathoracic malignancy are presented.

Bronchogenic Cancer Confused With Fibro-Caseous Pulmonary Tuberculosis

Case 1 (Figs. 1 and 2).—A fifty-year-old white man with a chronic cough had not been well since July, 1949, when he "was overcome by heat." A chest film in August, 1950, was reported to be "questionable." He had a cough for twenty-five years. Sputum studies were negative for tubercle bacilli. Tuberculin skin test was negative. He was admitted to the hospital on October 24, 1950. On November 1, bronchoscopic examination revealed a vascular mass in the right main bronchus; biopsy of this reported to be "chronic inflammation" (pathologist report 362 on November 7). Again on December 4, bronchoscopic examination was done and obstruction of the right upper lobe bronchus was noted. On December 7, a third bronchoscopic examination was done; an obstructive lesion in the right upper lobe bronchus was noted; the biopsy reported "chronic inflammation" (Pathologist report 441 on December 8). The chest film of November 29 (Fig. 2) showed marked clearing of the lesion noted in the chest x-ray of October 24 (Fig. 1).

Exploratory thoractomy and right pneumonectomy were performed on December 21. The patient was discharged January 14, 1951. Pathologist report 490 on January 23, 1951, was bronchogenic carcinoma, squamous cell type, metastatic in the regional lymph nodes.

He expired in December, 1951.

Cancer of the Lung Masquerading as Tuberculosis

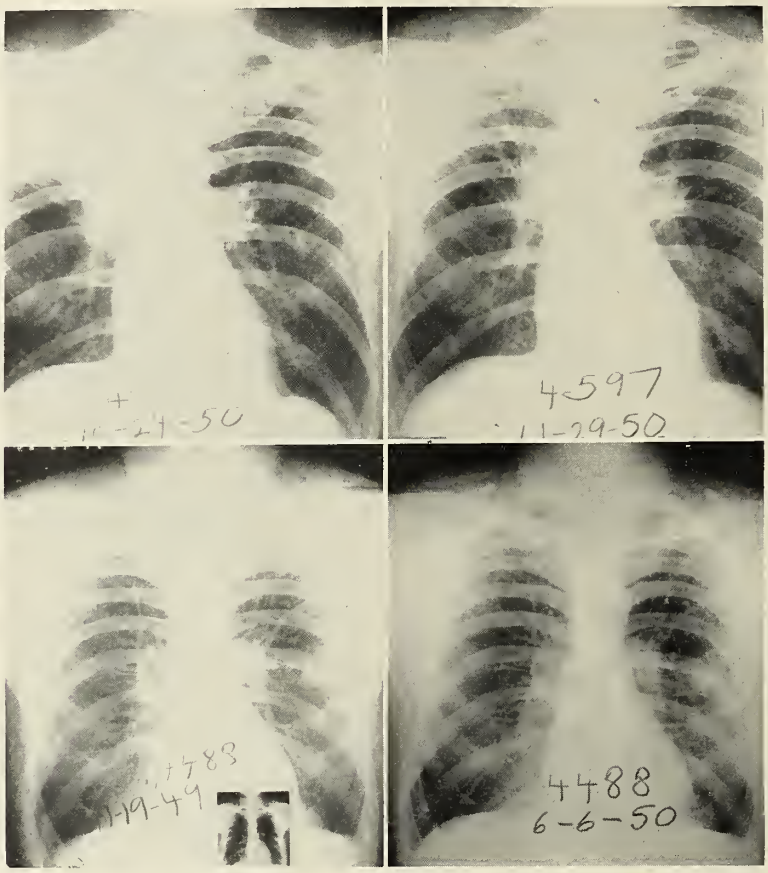
Case 2 (Figs. 3 and 4).—A fifty-nine-year-old white man was transferred to the Ingham Sanatorium on June 6, 1950, for surgical excision of a lesion in the left lung. He had no complaints. A routine chest x-ray taken in October, 1949, revealed a lesion in the left lung field (Fig. 3). The lesion was considered to be a tuberculoma; chest x-ray every three months was advised. The x-ray

From the Ingham Chest Hospital, Lansing, Michigan.

of June 6, 1950, showed a slight enlargement of the lesion (Fig. 4) and a thoracotomy was advised. The thoracotomy, on June 15, revealed a mass in the lingula; local excision was done; frozen section report was "bronchogenic carcinoma" (Pathologist report 1003 on June 17). A left pneumonectomy was then carried out.

Watching a Bronchogenic Carcinoma Grow

Case 3 (Figs. 5, 6, 7 and 8).—H.H., a sixty-eight-year-old white man complained of a chronic cough, shortness of breath, and weakness. These symptoms were evident for three years. He had lost thirty pounds in weight. Chest x-ray on January 2, 1948 (Fig. 5), appeared to



Figs. 1 and 2. *(above).* Case 1. The x-ray pictures of this case are compatible with a diagnosis of fibrocaseous pulmonary tuberculosis. Sputum was negative for tubercle bacilli; although this does not rule out tuberculosis. The rapid clearing of the lesion on x-ray was more indicative of a non-tuberculous pneumonitis. Repeated bronchoscopic examination was negative for cancer. An obstructive lesion of the right upper lobe bronchus in a patient with negative sputa and negative tuberculin prompted us to proceed with exploratory thoracotomy. Righ pneumonectomy was done and bronchogenic carcinoma found. To further confuse the picture the laboratory will sometimes report that the sputum contains tubercle bacilli.

Figs. 3 and 4 *(below).* Case 2. The lesion noted in the left lung field on November 19, 1949 (Fig. 3), is indistinguishable from tuberculosis as indeed it was thought to be. After slight enlargement of the lesion (Fig. 4), it was resected and found to be bronchogenic carcinoma. Although no other evidence of carcinoma could be found in the resected left lung the carcinoma had apparently already metastasized widely as revealed by the subcutaneous nodules.

No further malignancy could be found in the lung. On July 4, examination revealed a number of subcutaneous nodules; one was excised and microscopically (Pathologist report 10 on July 5) was found to be metastatic carcinoma similar to that removed from the lung. The patient was discharged July 12.

He expired August 9, 1950.

be normal. In the x-ray of January 5, 1949 (Fig. 6), a definite lesion was seen in the left apex. On March 2 (Fig. 7) the lesion was noted to be larger and on June 13 (Fig. 8) still larger. He was observed elsewhere and subsequently admitted to Ingham Sanatorium on August 2; where left thoracotomy and pneumonectomy were done. The pathologist report was: "bronchogenic, undiffer-

entiated carcinoma of the left upper lobe with widespread metastases."

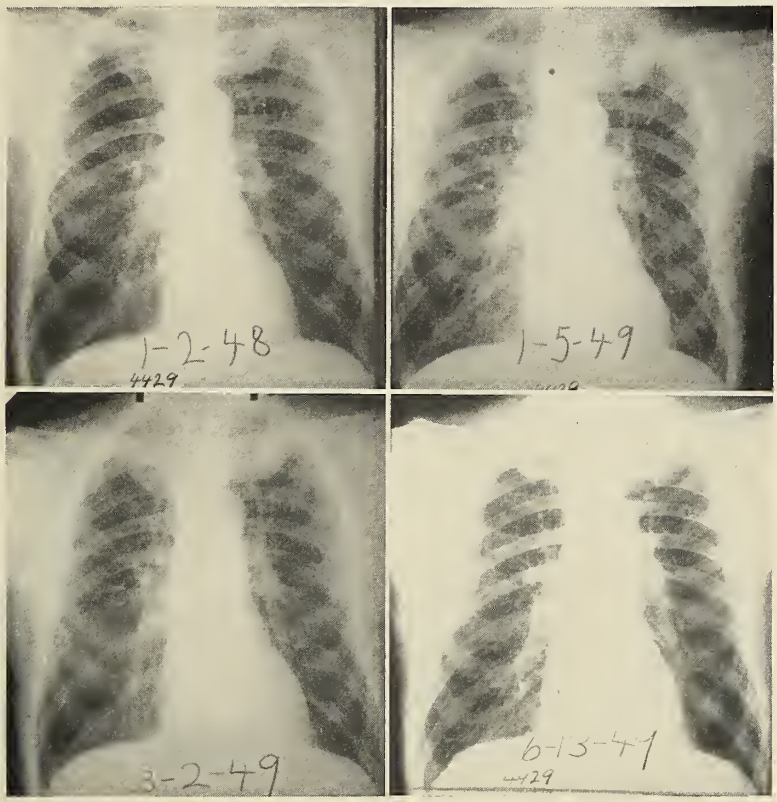
Carcinoma Producing Middle Lobe Syndrome

Case 4 (Figs. 9, 10 and 11).—A.M., a sixty-one-year-old white man was admitted October 5, 1953, with the following symptoms: chronic cough "fatigue for one and one half years; cough, and loss of twenty-one pounds in weight."

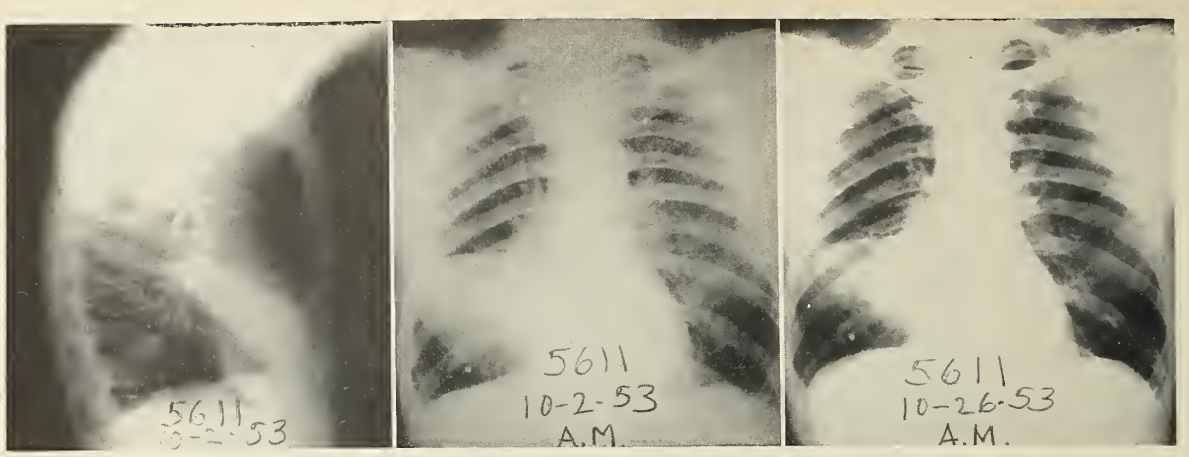
Lateral chest x-ray on October 2 (Fig. 9) and a posterior-anterior x-ray (Fig. 10) showed consolidation of the right middle lobe. Bronchoscopic examination on October 25 was essentially negative. Chest x-ray on October 26, after antibiotic therapy (Fig. 11) showed some clearing of the consolidation of the right middle lobe. In spite of these findings on October 27, right thoracotomy was performed and an enlarged node which was compressing the right middle lobe bronchus was dissected out; frozen section was reported malignant (Pathologist report IS 161-53). Right pneumonectomy was then carried out. The pathologist report (IS-161-53) was: "squamous cell carcinoma of the right middle lobe." Postoperative course uneventful. The patient was discharged on November 11.

Carcinoma of the Lung Confused with Pneumonia and Post-pneumonic Empyema

Case 5 (Fig. 12).—This fifty-three-year-old white man developed a productive cough, occasionally flecked with blood three months prior to admission to the hospital on March 8, 1952. He had been treated, at home for pneumonia in November, 1951; following this he was treated for post-pneumonic empyema. Pleural fluid was negative for tubercle bacilli. Bronchoscopic examination on March 20 was negative. Figure 12 shows the chest x-ray taken on February 25. Daily thoracentesis of the left pleural cavity was being done. As the amount of pus aspirated continued to be large, exploratory thoracotomy was advised and carried out on March 28. There was no empyema but there was a large, thin-walled abscess in the left upper lobe secondary to carcinoma of the left upper lobe; left pneumonectomy was performed. Pathologist report (IS 41-52): "advanced necrotizing bronchogenic carcinoma, squamous cell type with metastases to the subcarinal lymph nodes. The patient was discharged April 12, 1952. Postoperative course was uneventful. He expired in November, 1953.



Figs. 5, 6, 7 *(above)* and 8 *(below)*. Case 3. This case illustrates the rapid growth of bronchogenic carcinoma. The chest x-ray of January 2, 1948 (Fig. 5), appears normal while the film of January 5, 1949 (Fig. 6), taken twelve months later reveals a large lesion in the left apex. The lesion may have been present in the lungs on January 2, but if so it was not of sufficient density to be noticed on the film. In this case procrastination for seven months delayed the operation.



Figs. 9, 10 and 11. Case 4. This case illustrates bronchogenic carcinoma arising in the right middle lobe producing atelectasis of that lobe. Some clearing of the consolidation after antibiotic therapy (Fig. 11) might lead one to conclude that the primary trouble was only inflammatory. Also the bronchoscopic examination in this case was not revealing.



Fig. 12. Case 5. Bronchogenic carcinoma usually produces symptoms only after the occlusion of a bronchus with the subsequent development of atelectasis and suppuration in the lung distal to the occluded bronchus. Pleural effusion is apt to follow the infection in the lung. In this case a large abscess had developed in the left upper lobe following occlusion of the bronchus by the carcinoma.

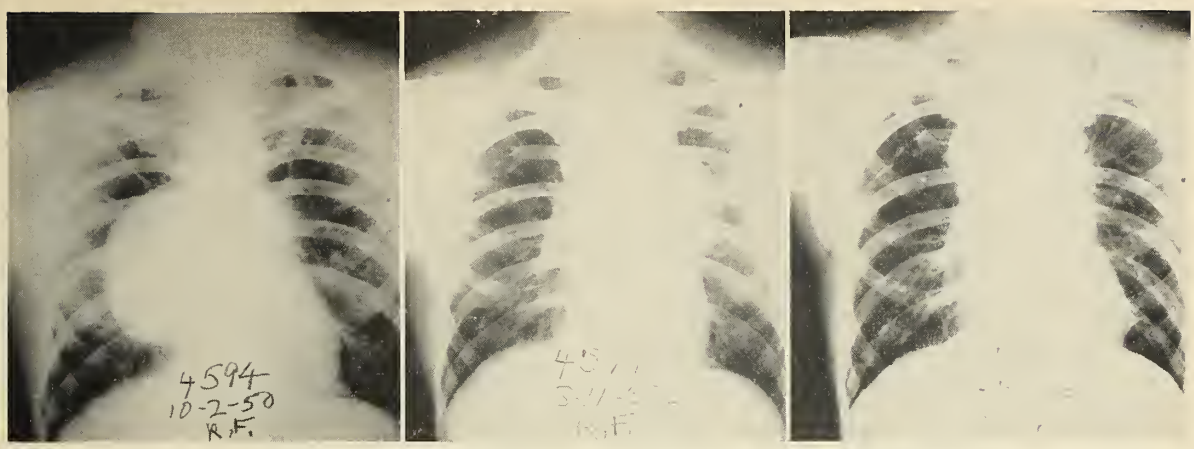
Fig. 13. Case 6. The chest x-ray shows what seems to be marked cardiac enlargement. Pericardial tap attempted but no fluid obtained. Interestingly enough whereas this patient had massive involvement of most of the viscera, mediastinum and retroperitoneal nodes with lymphosarcoma there was no palpable enlargement of the superficial nodes.

Lymphoblastoma Confused with Pericardial Effusion

Case 6 (Fig. 13).—A forty-eight-year-old white man with a chronic cough and dyspnea was admitted to the hospital April 6, 1953. He had been perfectly well until January 17, when, while on the job, he had bad onset of pain in the right chest; since then his course had been downhill. Many studies were not conclusive. The chest x-ray revealed (Fig. 13) marked enlargement of what appeared to be the cardiac outline. There was no enlargement of superficial nodes. On April 9 exploratory thoracotomy revealed a tremendous tumor occupying the mediastinum; the heart was small and displaced downward and to the left. He expired postoperatively on April 9. Autopsy revealed lymphosarcoma with massive involvement of the mediastinum, lungs, heart, kidneys, pancreas and retroperitoneal nodes.

Mediastinal Carcinoma

Case 7 (Figs. 14, 15 and 16).—The patient was a thirty-six-year-old white man. He had a chronic cough and had been "wheezing since December, 1949." He was admitted to the hospital on October 17, 1950. Chest x-ray film on October 2 (Fig. 14) revealed a huge tumor extending into the right pleural cavity. On October 19, right thoracotomy and resection of the tumor was performed. He was dismissed on October 29. The tumor recurred on the left side (Fig. 15), he was re-



Figs. 14, 15 and 16. Case 7. This patient had three operations for recurrent mediastinal carcinoma with palliative results.

admitted on March 24, 1952, and on March 28, left thoracotomy and resection of the tumor was done. Massive recurrence in the superior mediastinum and neck (Fig. 16) with marked displacement of the trachea to the right and obstruction to the airway was found in September, 1952. On September 27, he was again admitted and on September 29, through a cervical and sternum-splitting incision, the large carcinoma in the neck and superior mediastinum was resected. The immediate postoperative result was good. The patient was discharged on November 18 (Fig. 16). (Pathologist reports IS-146-53, IS-40-52, IS-46-52, "recurrent carcinoid tumor of the mediastinum.")

Neurofibroma

Case 8 (Fig. 17).—Routine school chest x-ray film of this eighteen-year-old white man revealed a tumor in the apex of the right lung (Fig. 17). The history was that his right eye lid had begun to droop at six years of age. Examination revealed Horner's syndrome of right side of head and neck. He was admitted to the hospital on November 26, 1951. A thoracotomy was performed on November 29. The tumor was found to be retropleural and to be involved with the right sympathetic trunk. Pathologic report (IS-83-51) "Neurofibroma showing degenerative changes." Postoperative course uneventful. The patient was discharged on December 7. Examination on February 6, 1954, revealed him to be well; the Horner's syndrome is still present.

Hamartoma

Case 9 (Fig. 18).—This fifteen-year-old white girl had a chest x-ray film taken during a mass survey program on October 10, 1951; the x-ray revealed a large mass in the right lung field. Subsequent chest films on June 3, 1952, and December 31 (Fig. 18) revealed the lesion to be unchanged. Right thoracotomy was performed elsewhere; the lesion was reported to be a hamartoma. (The tumor was located in the superior segment of the right lower lobe and only this segment was excised.)

Bronchial Adenoma

Case 10 (Fig. 19).—This twenty-nine-year-old white woman gave a history of having had pneumonia two weeks previously. She continued to have trouble in the right lower lung as shown by the chest x-ray film (Fig. 19). The sputum was reported positive for tubercle bacilli on culture and guinea pig inoculation. The tuberculin skin test was reported negative in both dilutions. She was admitted to the hospital on June 1, 1953. On June 2, bronchoscopic examination revealed a reddened granulomatous area in the right lower lobe bronchus. Biopsy of this lesion was reported (IS-84-53) "poorly differentiated cell carcinoma." She was discharged on June 15. The patient was operated upon elsewhere; the right middle and lower lobes were removed. A soft fungating tumor was found occluding the right lower lobe bronchus. All sub-carinal lymph nodes were removed. Final pathological diagnosis; "bronchial adenoma of the cylindroma type with no extension to the nodes."

Atelectatic Left Lower Lobe Hiding Behind the Heart

Case 11 (Fig. 20).—The patient, a sixty-two-year-old white woman, had been hospitalized for "virus pneumonia" two years previous; since that time she has had a productive cough, dyspnea and small hemoptysis. Chest x-ray on February 4, 1953 (Fig. 20), was not very revealing. She was admitted to the hospital on February 5. However bronchoscopic examination on February 6 revealed a mass in the left lower lobe bronchus; biopsy of this mass revealed "papillary adenocarcinoma." (Pathologic report IS-24-53.) Left pneumonectomy was performed on February 12. A huge carcinoma envolving the left lower lobe was found; this lobe was completely atelectatic. The patient was discharged from the hospital on March 3.

Cancer of the Lung Known to be Present from July 19, 1950, to February 2, 1953, With Little Change

Case 12 (Figs. 21, 22 and 23).—This patient, a forty-two-year-old white woman, was transferred for surgical resection of a lesion in the right lung. On July 19, 1950 (Fig. 21), a routine chest x-ray had revealed a nodule in the right lung; this was thought to be a benign le-

sion. On January 23, (Fig. 22), the lesion was noted to be present. She was admitted to the hospital on January 31. The chest film of February 2, 1953 (Fig. 23), showed slight enlargement of the lesion. Bronchoscopic examination on February 2 was normal. On February 5, right thoracotomy was performed and as the lesion was admitted to the hospital on November 5 and she is now convalescent.

Plasmacytoma

Case 13 (Figs. 24, 25, 26 and 27).—This fifty-seven-year-old white woman complained of a chronic cough for

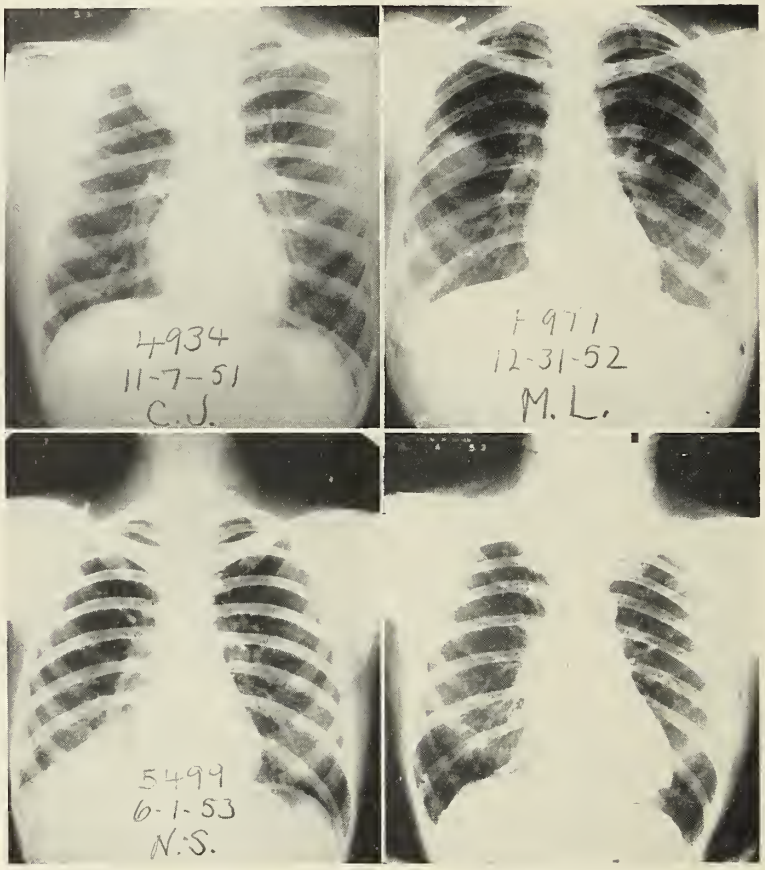


Fig. 17 *(upper left).* Case 8. This tumor was picked up on routine chest x-ray when the boy was eighteen years of age. The tumor must have been present at six years of age, because it was at that age when drooping of the right eye lid was noted. Horner's syndrome developed and has persisted.

Fig. 18 *(upper right).* Case 9. This large tumor in the superior segment of the right lower lobe of this fifteen-year-old white girl proved to be a benign tumor, a hamartoma.

Fig. 19 *(lower left).* Case 10. The bronchial adenoma in this twenty-nine-year-old white girl, by partial occlusion of the right lower bronchus, was producing clinical signs of pneumonia. Bronchial adenoma is regarded as a precancerous lesion and must be resected.

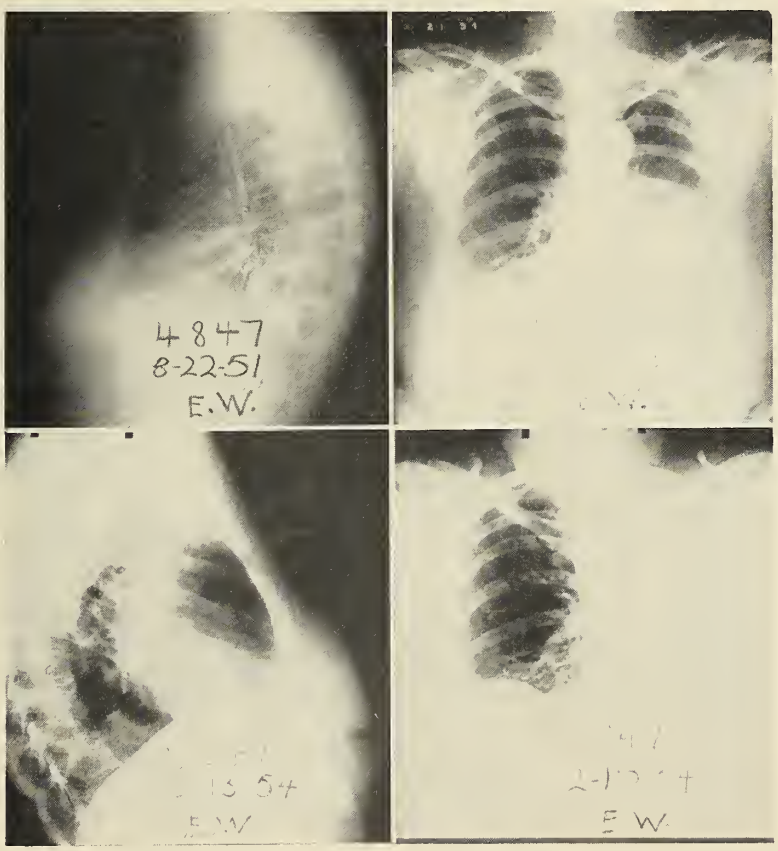
Fig. 20 *(lower right).* Case 11. The chest x-ray of this sixty-two-year-old white woman (Fig. 20) was not revealing although left thoracotomy revealed a large cancer in the left lower lobe with complete atelectasis of this lobe. The history would strongly indicate that this cancer has been present for over two years.

presumed to be tuberculous a right upper lobectomy was performed. The frozen section report (IS-23-53) was "ulcerating carcinoma of a bronchus and epithelioid pulmonary tuberculosis." Right pneumonectomy was therefore done. Postoperative course uneventful. This was one patient with carcinoma of the lung who didn't smoke. The patient was discharged on March 3, 1953. She developed empyema one year postoperative and was re-

the past seven years, which had grown worse the past six months. Recently, dyspnea and chest pain had developed. She was admitted to the hospital on August 8, 1951. Pleural effusion was present on the left; following left thoracentesis chest x-rays (Figs. 24 and 25) revealed a large tumor in the posterior part of the left chest. This pleural fluid (pathologic report IS-55-51) was noted to contain atypial cells appearing malignant. Bronchoscopic

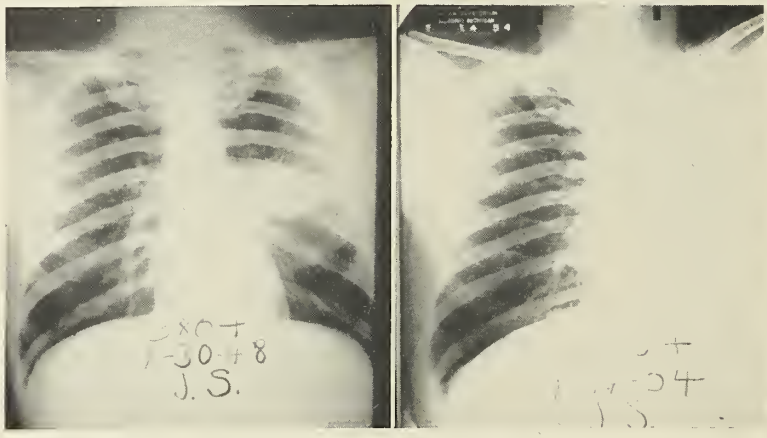


Figs. 21, 22 and 23. Case 12. Routine chest x-ray of this patient on July 19, 1950, revealed a mass off the right hilum. Subsequent x-rays, the latest being on February 2, 1953, revealed slight enlargement of the lesion. The pathologists report of the resected specimen was bronchogenic carcinoma and epithelioid pulmonary tuberculosis. Pathologist's report on December 23, stated "paraffin sections reveal a malignant neoplasm which appears to be a lymph node almost completely replaced by neoplasm. The cells comprising the neoplasm are bizarre in size, shape and staining reaction. The nuclei are hyperchromatic and nuclear cytoplasm ratios are markedly altered. Tumor giant cells are encountered. The cords of neoplastic cells are separated by bundles of dense connective tissue. Epitheloid tubercles and multinucleated giant cells of the Langhans type are found at the periphery of this tumor." Whether or not the malignancy was present when the chest x-ray of July 19, 1950, was taken is not known; the lesion noted on the film of July 19 may have been tuberculous, carcinoma developing at a later date.



Figs. 24, 25 *(above)*, 26 and 27 *(below)*. Case 13. Figures 24 and 25 are x-rays of the fifty-seven-year-old white woman showing the large tumor (plasmacytoma) of the left pleural cavity. Thoracotomy revealed widespread metastasis throughout the left pleural cavity. Figures 26 and 27 are films taken recently; the patient having been treated with x-ray therapy in the meantime.

examination on August 22 showed some compression of the left lower lobe bronchus. On August 28, left thoracotomy revealed a large soft tumor arising from the posterior part of the pleural cavity with widespread pleural metastases. Biopsy of this tumor was reported (pathologic report IS-58-51) as being "extramedullary malignant plasmacytoma." The patient was released on September 8, and was referred to Doctors Richardson and Cheney of Lansing who have treated the patient since 1951 with x-ray therapy. Figures 26 and 27 show the present status of the patient's chest.



Figs. 28 and 29. Case 14. Figure 28 illustrates a large density in the left hilar area of the forty-six-year-old white man prior to left pneumonectomy which was performed on January 31, 1948. The tumor was a well differentiated squamous cell carcinoma. The patient has remained well and continues to work at his regular job as a railroad switchman. Figure 29 is the chest x-rav taken on January 14, 1954, approximately six years after the left lung was removed.

Cure of Advanced Bronchogenic Carcinoma by Pneumonectomy

Case 14 (Figs. 28 and 29).—The patient, a forty-six-year-old white man, complained of a chronic cough and weight loss. His present illness began six months previously with cough (severe). He lost 40 pounds in weight in six months. Bronchoscopic examination and biopsy of a lesion in the left bronchus were performed elsewhere; carcinoma was reportedly found. He was admitted to the hospital on January 22. Chest x-ray on January 30 (Fig. 28) revealed a large density in the left mid lung field involving the hilum. A thoracotomy on January 31 revealed a 5 cm. stony hard mass in the hilum of the left lung. Left pneumonectomy was performed. (Pathologic report No. 336-350 on January 31.) "The lung contains an epithelial new growth which appears to originate near the bifurcation of the primary bronchus and to extend into the lung parenchyma. This growth is made up of masses and strands of well differentiated cells of the squamous type. In some areas it exhibits definite tendency toward cornification. We were unable to demonstrate histological evidence of metastases in the lymph nodes dissected from the surgical specimen or in the mediastinal node submitted separately. Sections cut from the proximal portions of the primary bronchus do not appear to contain tumor tissue. Diagnosis: Squamous cell bronchogenic carcinoma." The patient was released from the hospital on February 10.

He is now fifty-two years of age and is working regularly as a railroad switchman. Figure 29 shows his chest x-ray taken on January 14, 1954.

Discussion

Intrathoracic tumors are interesting problems often requiring exploratory thoracotomy for diagnosis. Procrastination in a doubtful lesion of the lung may be fatal. Early thoracotomy is the only way we can hope to cure bronchogenic carcinoma.

The rôle of cigarette smoking in the increase in the incidence of bronchogenic carcinoma is a matter of grave concern. It is hoped that this problem will soon be definitely resolved.

With early discovery in all physicians' offices, followed by prompt adequate therapy, it should be possible within the foreseeable future to control cervical cancer.

• • •

Recent studies have shown that 90 to 95 per cent of breast cancers are first discovered by the woman herself, usually accidentally.

Irradiation, either in the form of radioactive phosphorus or total body irradiation, is the treatment of choice in patients with chronic granulocytic leukemia.

• • •

In chronic lymphatic leukemia, localized roentgen irradiation is probably the most satisfactory form of therapy, although radioactive phosphorus can be used.

Problems of Nutrition in Ulcerative Disease of the Digestive Tract

By J. Arnold Bargen, M.D.
Rochester, Minnesota

FEW physicians have left such a lasting impression on their colleagues and have influenced subsequent workers in the field of a single phase of clinical investigation as much as William Beaumont.[6] The fame of Beaumont is well established in American scientific lore. The average schoolboy knows about him and the medical student is reminded early of endless possibilities of service and discovery which are opened to the prepared mind such as was that of Beaumont.

The physiologist and the biochemist are awed as they read in Beaumont's[4] own words his accounts of his observations of the behavior of the stomach of a human subject under a variety of experimental conditions. After all, he worked under most unfavorable conditions when compared to the opportunities of our present-day equipped laboratories.

Beaumont[6] was born in Lebanon, Connecticut, the son of a farmer, on November 21, 1785, and died on April 25, 1853. He had a rather long span of years of activity and study on the irascible and rather difficult Alexis St. Martin. His early and rather extensive experiments were done at Mackinac on Alexis St. Martin,[1] whom he had befriended in his home and whom he had nursed back to health after a gunshot wound to St. Martin's abdomen. Later on, Beaumont worked at Prairie du Chien,[1] Wisconsin, at the old Fort Crawford. Notes on his experiments are so voluminous and his studies had been so fundamental, having withstood the test of time, that now Beaumont's name is honored by some very outstanding collections of papers, mementos and memorials of all kinds.

Volumes have been written about Beaumont's activities and his personality, and large collections of his works have been gathered in important medical centers. There is the Dr. William Beaumont collection of Chicago donated by Dr. and Mrs. Ethan Allen Beaumont of Wisconsin, which is one of the largest. Dr. Arno B. Luckhardt[23] was largely responsible for obtaining this collection for the University of Chicago. There is another in the library of the Washington University Medical School at St. Louis, Missouri.[41] There is a Beaumont Medical Club at Yale[24] and eighteen annual Beaumont Lectures have been delivered on the Carmalt Foundation at Yale.[24] Wayne County Medical Society of Michigan has had a Beaumont lectureship for many years and I delivered the twenty-fifth annual lecture[3] of this series in 1945.

TABLE I.[31] RESULTS OF LOSS OF ESSENTIAL CHEMICALS AND FOODS

Chemicals and Foods	Results of Loss
Fat	Fatty stools; loss of weight; loss of calcium (as soaps); decreased concentration of fat in blood.
Protein	Creatorrhea; negative nitrogen balance; hypoproteinemia; loss of weight; edema.
Carbohydrate	Fermentation of stools; abdominal distention and flatulence; flat glucose tolerance curve; decreased concentration of blood sugar.
Vitamin A	Night blindness; xerophthalmia; toadskin; bronchitis.
Vitamin B	Glossitis; cheilosis; nasolabial seborrhea; blepharitis; peripheral neuritis; diarrhea; pellagrose dermatitis; hypochromic anemia.
Vitamin C	Gingivitis; bleeding tendency; scurvy.
Vitamin K	Hypoprothrombinemia; bleeding tendency.
Iron	Hypochromic microcytic anemia.
Calcium	Hypocalcemia; tetany; rickets; deformed bones; osteoporosis.

Now the physicians of the State of Michigan have banded together to build a permanent memorial in the spot where Dr. Beaumont first saw his famous patient, Alexis St. Martin, on Mackinac Island. I understand that this building will be dedicated next July and that the shrine will be furnished in the style of the period of 1820. The Michigan doctors of medicine deserve great credit in building this Beaumont memorial to honor one of their own, to help inform the people of Michigan and the world that medicine is proud of its accomplishments in the past and to stimulate others in their work in the future.

It has been a tradition among physicians that we honor those in our ranks whose accomplishments benefit the public without even the slightest consideration of aggrandizement. When we consider the handicaps under which Beaumont worked and think of our well-established and well-equipped laboratories today, we must view his accomplishments with amazement. He accurately recorded his observations in several excellent volumes and many additional papers. How well this was done is attested to by the fact that even now lectures are being instituted in his memory and

Beaumont Lecture presented at the meeting of the Michigan State Medical Society, Grand Rapids, Michigan, September 25, 1953.

From the Division of Medicine, Mayo Clinic, Rochester, Minnesota.

through the years, many such lectureships have been established. In the series of lectures on the history of medicine given under the auspices of the Mayo Foundation at Rochester, Minnesota, the Medical School and the Graduate School of the University of Minnesota, Minneapolis, Minnesota, the Medical School of Northwestern University, Chicago, Illinois, the Medical School of the University of Wisconsin, Madison, Wisconsin, the Des Moines Academy of Medicine, Des Moines, Iowa, and the Medical School of the University of Iowa, Iowa City, Iowa, and published in book form, there is one lecture entitled "The Medical Corps of the Army and Scientific Medicine," by Merritte W. Ireland,[19] which is devoted almost wholly to Dr. Beaumont's work. When we think of the train of investigations that have been started by some of the best physicians of their respective times in the 100 years following, there is little wonder that we are awed at Beaumont's accomplishments.

Hyman Goldstein[16] referred to the work of Corvisart and Leroux on the subject, Magdalene Gore, who had a gastric fistula, but the earliest and most outstanding work of this type was done by Beaumont on Alexis St. Martin.

Later, we have the extensive studies by A. J. Carlson[8] on Fred Vlcek from about 1912 to 1920, and still later the work by Wolf and Wolff[46] on their subject, "Tom." These three individuals have made history in the experimental world which concerns itself with gastric secretion and motility of the stomach of the human, and it was Beaumont's original and fundamental studies which stimulated many others to investigations on animals.

The fundamental studies by I. P. Pavlov through the establishment of his gastric pouch[28] gave us much information on the work of the digestive glands. Other men whose work was stimulated by these earlier investigators are Frank Mann,[25] Andrew Ivy,[20] Lester Dragstedt,[15] B. J. E. Ihre[18] and a host of others. Many of the researches of these men have dealt with the relationship of the aggression mechanism inherent in hydrochloric acid and pepsin to the causation of lesions of the upper digestive tract.

The works of numerous physicians of the state of Michigan have left and will leave their mark in the annals of medicine. Among them, we should mention John Mateer,[26] Marvin Pollard,[29] Frederick A. Coller,[10] and Henry K. Ransom.[34]

In his address as president of the American College of Surgeons, Dr. Coller[11] stressed those virtues which were so well embodied in the works of Beaumont. Dr. Coller[12] also has made important contributions to medical progress by his emphasis on preoperative and postoperative care of the patient.

Dr. Henry K. Ransom,[35] in 1944, reported his excellent study of the problems of gastrojejunocolic fistula, stressing their importance as a late complication of gastroenterostomy for a duodenal ulcer and emphasizing the importance of correcting the deficiencies resulting from such fistulas before their surgical repair is undertaken. Dr. John Mateer[27] has made valuable contributions to the subject of liver disease and Dr. Marvin Pollard[30] has emphasized certain essential factors in the management of gastric hemorrhage.

All of these are only a few of the fundamental studies initiated and stimulated by Beaumont's original work. You will do well to read the volume by Grace, Wolf and Wolff[17] entitled *The Human Colon* and Youmans'[47] *Nervous and Neurohumoral Regulation of Intestinal Motility.*

Ulcerative Disease of the Digestive Tract

Keeping in mind always that the care of the patient is paramount and must be continued in the best scientific manner in spite of our inadequacies and the many gaps in our knowledge, let us now add a few practical points to our knowledge of the inception and management of ulcerative disease of the digestive tract.

The Esophagus.—Peptic ulcers may occur in the esophagus. Redish and Kertzner[36] have noted that peptic ulcers occur in the individual with the short esophagus which is congenital in origin and which permits a more or less constant exposure to gastric secretion. The presence of ectopic mucosa has also been suggested as of importance. Lesions involving the cervical or thoracic vagi are also known as factors important in the production of peptic ulcer of the esophagus.

Cross and Wangensteen[13] have found that bile and pancreatic juice are factors in producing esophageal erosions. Ulcers of this region may have all the features of peptic ulcers elsewhere, even to the point of perforation, as stressed by Coffey and Dravin.[9] The problem of peptic esophagitis is brought to our attention from time to time. The symptoms of this condition may be vague or hard to identify. Patients who have it may

have associated gastric lesions masking the picture. There is no standard therapy.

Potter, Schaer and Stewart[33] have pointed out that associated with any of these lesions, there may be stricture formations and patients commonly have a great deal of distress. Dysphagia is not uncommon to a point where eating becomes a burden. The patient loses weight and suffers the result of poor nutrition simply because of his inadequate intake of food. The triad of esophagitis, duodenal ulcer and esophageal hiatal hernia of the short-esophagus type occurs not infrequently.

Wilson[44] has offered an adequate program of therapy for patients with stenosing esophagitis, a condition frequently difficult to manage. The ulcers of the esophagus are usually situated in the distal third and symptoms are those of epigastric or substernal pain, dysphagia and sometimes hematemesis. Sometimes the pain or discomfort from these lesions occurs two or three hours after meals and so its differentiation from gastric or duodenal ulcer is constantly before us.

The Stomach.—It is, of course, in the stomach that Beaumont's studies yielded the greatest dividends. He was fortunate in being able to work on a viscus that gave so much promise of positive accomplishments.

The outstanding anatomic peculiarity of the gastric mucosa is its rich capillary network. Robertson[37] has pointed out that the injection of this network with India ink gives the mucosa a solid black surface, so profuse is the capillary supply. The outstanding physiologic fact about the gastric mucosa is the wide range in the distention of these capillaries by blood. At one time, the mucosa may be pale and apparently almost bloodless, at another time swollen and deeply red. At this latter stage the commonest lesion of the mucosa is hemorrhage. The hemorrhages are usually punctate, may be multiple, and as a rule are small. Surgeon Beaumont, the master observer, in studying the stomach of Alexis St. Martin, recorded his observations of the living gastric mucosa as follows:

> In . . . undue excitement, by stimulating liquors, overloading the stomach with food—fear, anger, or whatever depresses or disturbs the nervous system—the villous coat becomes somewhat red and dry. . . . There are sometimes found, on the internal coat of the stomach eruptions or deep red pimples—at first pointed and red, but frequently becoming filled with white purulent matter.
>
> Diseased appearances, similar to those mentioned above, have frequently presented themselves, in the course of my experiments and examinations. . . . They have generally, but not always, succeeded to some appreciable cause. Improper indulgence in eating and drinking . . . eating voraciously or to excess, swallowing food coarsely masticated . . . invariably produce similar effects. . . . These morbid conditions are however seldom indicated by any ordinary symptoms, or particular sensations described or complained of. . . . They could not, in fact, in most cases have been anticipated from the external symptoms; and their existence was only ascertained by actual, ocular demonstration. . . .
>
> It is interesting to observe to what extent the stomach . . . may become diseased without manifesting any external symptoms of such disease, or any evident signs of functional aberration. . . . Extensive active or chronic disease may exist in the membranous tissues of the stomach . . . more frequently than has been generally believed.[5]

Professor Carlson,[8] of he University of Chicago, in discussing this question stated that he had confirmed Beaumont's observations in patients who had a gastrostomy tube inserted into their stomach. Some of the recent papers on the results of gastroscopic examination of the stomach hint at similar findings.

Nevertheless the frequent discovery at necropsy of these tiny hemorrhages in the stomach has a certain significance beyond the so-called antemortem lesions.

The inevitable result of these hemorrhages is an ulcer, that is, destruction of the mucosa in the region of the ruptured capillary. This ulcer may be extremely superficial and very small and the repair of the defect may be perfect. If the hemorrhage is somewhat larger and deeper, the resulting ulcer may be repaired more slowly and while ultimately the surface of the mucosa may be restored, certain defects in the normal anatomic arrangement may remain. Presumably such an area is more exposed to future hemorrhages and more severe and deeper ulcerations. In some of these ulcers healing may be inhibited to such an extent that a chronic ulcer develops which gives rise to a fairly definite clinical syndrome. The exact cause of the nonhealing of such ulcers is not known, but it is suggested here that a change in the quantity or quality of the protective coating of mucus has occurred, possibly in some instances through influences of the central nervous system. The residual lesions resulting from incom-

plete repair of the mucosa may be listed as accumulations of lymphocytes, thickening and disorganization of the muscularis mucosae, disappearance of the specialized peptic and acid cells of the mucosa and hyperplasia of the fundamental or mucous cells of the mucosa. It is suggested that as long as the peptic and acid cells remain, the phenomena of organized repair can apparently proceed in an orderly manner. However, when sufficient destruction of these special cells has been produced, disorganization of reparative processes ensues to such an extent that independent and unorganized proliferation of cells may produce a cancer.

It becomes obvious from these observations that nutritional disturbances may result. It is not necessary to have a gastric fistula such as Alexis St. Martin had to interfere with nutrition. Patients with ulcers of the stomach, even of the benign type, have a great deal of discomfort; they may be placed on deficient diets, may be given too much alkali and so a vitamin deficiency and an alkalosis may result.

An unprecedented amount of experimental work has been done in the laboratory of Lester R. Dragstedt[14] on the inception, development and progression of peptic ulcer. He has stressed the importance of a hypersecretion of gastric juice in humans who develop ulcer.

The Duodenum.—The formation of a peptic ulcer of the duodenum is probably not too different from that of peptic ulcers in the esophagus and stomach. There has been considerable controversy about the origin of peptic ulcer in the duodenum. Some have felt that a chronic peptic ulcer does not originate from any of the acute lesions seen in surgical and necropsy specimens of the stomach, duodenum, or jejunum. Others have felt just as definitely that chronic peptic ulcers originate from acute lesions. It is difficult to conceive how a chronic ulcer could occur without its being initially an acute lesion of the mucosa. Acute and chronic ulcers of the stomach and duodenum coexist. Such acute ulcers and erosions may occur in the stomach and duodenum in acute and chronic infectious conditions. It is well known that extensive burns of the skin may cause erosions and acute ulcers in the duodenum. It would not seem too farfetched to think that chronic ulcers arise from these lesions. Chronic ulcers occur at the site of predilection of acute lesions. Chronic ulcers have been known to develop from experimental acute ulcers. Such mechanisms as vascular infarction, spasm of the muscularis mucosae, disturbances of capillary circulation, excessive secretion of acid pepsin, toxic agents, constitutional and psychosomatic disturbances, deficient, irritating diet and other things taken into the stomach, and metabolic poisons may all play a part in the inception of ulcers.

Rosenow[38] found that on intravenous injection of streptococci into animals there developed hemorrhage, necrosis and ulceration in the duodenum. This was in line with his theory of elective localization. It is of interest that ulcers once established are reactivated at certain seasons of the year, that is, the spring and fall. Ulcers are likely to become active when patients have upper respiratory or intercurrent infections. Nervous tension is of the greatest importance in reactivating an ulcer already present. Ulcers tend to become active during the periods when patients are emotionally upset, and at the termination of emotional crises the ulcers progress into a period of quiescence. The factors which influence the production of these peptic ulcers also are important in nutritional disturbances in patients with peptic ulcer. The diet prescribed will frequently be deficient in important food items. A study of patients on ulcer diets has frequently shown low values of ascorbic acid and other vitamins. Alkalosis and hypocalcemia, as well as disturbances of other metabolites, are not uncommon. Unless careful attention is paid to all the factors in the diet, it is likely to be low in proteins, minerals and vitamins. It must be remembered that calcium, phosphorus, sodium, potassium, chlorine, magnesium, manganese, iodine, iron, copper, sulfur, zinc, cobalt, bromine and fluorine constitute the elements classed as the elements of nutrition. These elements are interrelated and balanced against each other in body function and cannot be considered as single elements with singular functions. Although calcium and phosphorus only approach one per cent of the total body composition, and yet comprise ninety per cent of the ash of the body, they are only illustrative of the great importance that a proper balance of these elements has in good nutrition. Hence, the diet should be prepared with these elements in mind.

Numerous books on peptic ulcer and its management have been written in the last two decades. The fundamentals of treatment by all of these

authors, including Ivy,[20] Sandweiss,[39] Winkelstein,[45] and others, are based on a fundamental work of their predecessors in physiology. The book by Smith and Rivers,[43] while it too is fundamentally physiologic in nature, has made one great contribution in bringing the character and pathways of pain in peptic ulcer to our attention.

Meckel's Diverticulum.—Peptic ulcers also occur in Meckel's diverticulum, the commonest congenital anomaly of the intestinal tract. It is possible that these ulcers form in the same way that they do in the stomach. These ulcers may perforate, cause obstruction, and not infrequently are associated with massive hemorrhage. Unless recognized early, marked nutritional disturbances like those described in other diseases of the small bowel may occur.

The Small Intestine.—Nowhere in the digestive tract is there so much disturbance of nutrition as from lesions of the small intestine (table). This, of course, is as one would expect since the small intestine is the major source of absorption and assimilation. It will immediately become obvious that (1) an intact wall of the small intestine, (2) a normally functioning mucosa, (3) normal peristalsis and normal transportation of the chyme, (4) the presence of adequate digestive enzymes and bile and (5) intact lymphatics are essential for adequate digestion and absorption. A break in any of these may eventuate in a deficiency state.

Impairment of the absorptive ability of the small intestine is almost universally incriminated as the underlying cause of jejuno-ileac insufficiency. The symptoms of jejuno-ileac insufficiency are protean. The condition may be mild or severe; it may be manifested as a diffuse deficiency state or it may cause a loss of only one or two substances to the body. Whatever the cause, chronic jejuno-ileac insufficiency will produce fatty diarrhea, macrocytic anemia, tetany and various vitamin deficiencies.

The different types of anemia that may be associated with jejuno-ileac insufficiency are of particular interest. The loss of iron naturally produces microcytic hypochromic anemia. This commonly occurs in the early stages of the syndrome. This anemia may be further aggravated by a deficiency of members of the vitamin B complex, as well as by bleeding produced by the hypoprothrombinemia secondary to vitamin K deficiency and by a decrease in the amount of vitamin C stored in the body.

The appearance of megaloblastic anemia marks a more advanced stage of the insufficiency. This condition, which cannot be distinguished hematologically from pernicious anemia, is usually considered the result of defective absorptive or excessive loss of the erythrocyte-maturation factor.

It is interesting to note that in some cases in which megaloblastic anemia is associated with jejuno-ileac insufficiency the anemia will not respond to the administration of liver extract but will disappear promptly after surgical correction of an abnormality.

The clinical picture may become still more complicated by the appearance of a macrocytic hypochromic anemia, the result of severe combined deficiences of iron and the erythrocyte-maturation factor. Such a clinical picture also has been observed in the course of nontropical sprue.

The other condition, more common, and more serious, in which the clinical picture of a deficiency state occurs not infrequently is the so-called regional enteritis. This is an exudative, ulcerative and hyperplastic granulomatous lesion of any portion of the small intestine, although the site of its predilection is in the distal ileum. There is considerable evidence to suggest that the etiologic agent of this condition is to be found in the fecal stream. It is probably carried by the fecal stream from which it is absorbed by the small intestine. Its production and absorption may in some way be related to the physiologic activity of the small intestine. This agent may exert its influence on the normal epithelial cells, causing them to be replaced by goblet cells. When the causative factor gains entrance into the interstitial spaces of the bowel wall, tubercles and lymphoid hyperplasia develop. The further course of the agent appears to be by way of the lymphatics where it causes focal intralymphatic endothelial hyperplasia. As a result of this, lymphatic obstruction and dilatation occur. Then follow lymphatic cellular accumulations and interstitial edema. With this, there is increased accumulation of bacteria and finally ulceration develops. The portion of the small bowel exposed to the greatest concentration of the offending substance is the distal ileum. Here it develops as an ulcerative, hyperplastic process. Perhaps a similar more mild form of the condition occurs in other segments of the

intestine. At any rate, even when disease is demonstrable only in short segments of the bowel, deficiency states like those observed in other ileojejunal insufficiencies occur. It is entirely possible that multiple etiologic factors — bacterial, metabolic, allergenic, psychosomatic — present a synergistic relationship and are responsible for development of regional enteritis. Be that as it may, the disease once established may result in tremendous bodily depletion.

Experiments on animals have demonstrated that the immediate effects of massive resection of the intestine are hunger, thirst, loss of weight and diarrhea. As much as sixty-six per cent[31] of ingested foodstuffs may be lost in the feces. Compensation occurs gradually. If the animals are fed a rich, easily assimilable diet, digestion becomes normal. The animals are able to absorb all foodstuffs and there is a considerable increase in the absorption of carbohydrates. The animals appear normal but they are very sensitive to unfavorable dietary and environmental conditions.

The compensatory process is characterized by hypertrophy and hyperplasia of the remaining portion of the intestine proximal to the site of the resection. Neither the stomach nor the portion of the intestine distal to the site of the resection undergoes any change. The diameter of the portion of the intestine involved in the compensatory process increases and it may become twice as large as normal. There also is an increase of as much as 400 per cent[31] in the absorptive surface of the remaining portion of the intestine. It appears likely that this increase in the absorptive surface approaches the epithelial area of the excised portion of the intestine. This compensatory process also has been observed in human beings who have undergone massive resection of the intestine.

The amount of human intestine that can be resected without causing serious sequelae or death varies greatly in different cases. The literature contains reports of cases in which patients have lived after the removal of more than 500 cm.[21] of the intestine. In some cases, excision of a relatively small portion of the intestine has been followed by severe metabolic disturbances.

Resection of the small intestine of human beings is followed by many sequelae. Diarrhea is the most frequent of these. It is associated with an excessive loss of fat, protein and electrolytes in the feces. This abnormality may be so severe and intractable as to interfere greatly with bodily nutrition, and it even may cause death. The diarrhea is aggravated by the inclusion of an excessive amount of fat in the diet. Anemia of various types, loss of weight, edema, tetany and pernicious vomiting are other sequelae that may occur. There also may be a decrease in the concentration of calcium and protein in the serum.

After resection of the small intestine, the physical condition of the patient appears to depend on the following factors: (1) the pathologic conditions which necessitated the resection, (2) the length and physical condition of the remaining portion of the intestine and the extent to which it is able to compensate for the resection, (3) the resistance of the patient, and (4) the type of dietary regimen that is instituted after the operation.

The symptoms resulting from the interference with absorption from the small intestine are protean. The amount of small intestine that can be removed or isolated without producing signs and symptoms of a nutritional disorder varies greatly in different individuals. Some persons have gotten along with remarkably small remaining segments of the small intestine and in other persons who have had a small involvement by regional enteritis demonstrable roentgenologically there have been marked disturbances. Such disturbances include marked increase in the prothrombin time, interference of absorption of glucose as indicated by a flat glucose tolerance curve, anemia with macrocytosis, a marked reduction in serum protein and sometimes a reversal of the albumin/globulin ratio, a tremendous interference with fat absorption, and a lowering of serum calcium and other important metabolites.

One must never lose sight of the importance of minerals in human nutrition. With the disturbance of normal mineral metabolism, severe and often dramatic changes in physiologic and psychosomatic reactions occur. The minerals are catalysts that make possible the function of enzymes. They form the structure on which the body is constructed. Supplied adequately, they make possible a healthy, strong body. When they are deficient in the diet or improperly absorbed, their absence may result in a variety of disturbances. All of these disturbances must be vigorously attacked by giving large excesses of those elements which are lacking, and more recently it has been found that the use of the hormones such as corticotropin (ACTH) has been of considerable help in restoring the nutrition

of patients with conditions such as the sprue syndrome.

The Large Intestine.—It is rather important that one be aware of the various elements which may play a rôle, not only in the inception, but also in the progression of ulcerative colitis and other maladies of the large intestine for one to understand how and why these various factors may be significant in changes in the bodily economy produced in patients who have ulcerative colitis. There are probably others, but the following conditions seem to have an important bearing on the progression of the disease known as ulcerative colitis: infection, nutritional disturbances, metabolic disorders, enzymatic excess, allergic manifestations, vitamin depletion, antiproteolytic substances, and psychosomatic factors may all have some importance in the changes produced in the patient who has ulcerative colitis.

That infection is the fundamental factor in the commonly known forms of ulcerative colitis is generally accepted. The importance of the relation of any particular organism or virus is not generally understood. I need not here refer to the extensive studies which have laid stress on the importance of a Streptococcus in one of the common forms of ulcerative colitis. Undoubtedly there are other infectious organisms which are important, including the Staphylococcus, the virus of lymphopathia venereum and others. My experience suggests that the forms of ulcerative colitis under common observation are in the nature of an infection and that with the progression and destruction caused by the disease, a variety of systemic disturbances occur. The secondary systemic changes are often more profound and more debilitating than the changes of the original disease and so may be confused with the primary manifestations of ulcerative colitis. My studies suggest that the factors that affect the progression of these diseases most severely and which play an important rôle in their inception are infection and nutritional and metabolic changes.

The depletion of body proteins and vitamins in ulcerative colitis has frequently been observed. This is so true that many internists have directed their therapeutic attention to the restoration of these body-building substances in an effort to control the disease. It is quite possible that the hepatic lesions and dysfunction that have been observed in ulcerative colitis may be due, at least in part, to malnutrition. In one study of ninety-one[21] cases of ulcerative colitis in which necropsy was performed, moderate to severe infiltration of the liver with fat occurred in forty-seven. In three, there was cirrhosis of the liver. It must be recalled that this occurred in patients sick enough to die from ulcerative colitis. However, varying degrees of infiltration with fat and hepatic dysfunction are common in the patient who has active ulcerative colitis. This conclusion has recently been substantiated by biopsies of the liver. The pancreatic lesions in the form of interstitial pancreatitis commonly found at necropsy may also bear in this direction. In one group of eighty-six cases[2] of ulcerative colitis in which necropsy was performed, interstitial pancreatitis was found in forty-six. In two cases the pancreatitis was acute. In five cases it was severe although chronic. In seventeen, it was moderate and chronic, and in twenty-two it was mild. In addition, in eleven other cases, there were definite pancreatic fibrosis and acinar atrophy.

Although depletion of minerals, vitamins and other substances fundamental to the body economy has been observed in ulcerative colitis, the most impressive observation has been the depletion of protein. This is probably attributable to a combination of factors. They include the poor intake of food, the increased catabolism of protein during fever, the loss of nitrogen, tissue fluids, blood and inflammatory exudate from the bowel, and the failure of synthesis of protein as a result of impairment of hepatic function. Increased fecal output of nitrogen resulting in negative nitrogen balance is fairly common in the patient seriously sick with ulcerative colitis.

Kirsner and Sheffner[22] found, in a careful analysis of the intake and output of patients with ulcerative colitis, that the loss of protein in the feces contributes significantly to the nitrogen deficit, that the increased output of nitrogen and amino acids in the feces appears attributable to the loss by intestinal excretion of inflammatory exudate and blood, rather than to unabsorbed food, and that the metabolism of protein is not grossly disturbed in patients with ulcerative colitis who are capable of ingesting adequate quantities of food. Sappington[40] studied the protein requirements of patients suffering from chronic ulcerative colitis. He, too, found large fecal losses of nitrogen. He found that no patient improved clinically unless positive nitrogen balance was achieved and

maintained. In some instances positive nitrogen balance preceded clinical signs of improvement by several weeks. He found that high protein feedings for several months might be necessary to correct the protein deficit. He felt that a poorly corrected, unrecognized chronic protein deficiency might be a very important factor in promoting relapse of the disease. Sheffner, Kirsner and Palmer[42] noted that, with the impairment of the protein balance and great bodily depletion of this important dietary material, it is quite obvious that other substances essential to the body economy will be depleted.

All the various vitamins are greatly reduced. This fact is particularly emphasized by such reports as the one by Bernay and Tartulier[7] on the importance of vitamin K. Long observation of patients with all manner of degrees of severity of many forms of ulcerative colitis has convinced me that the nutritional states occurring in ulcerative colitis are not causative but rather part of the picture and usually the result of long-standing and advanced colitis. Certainly the avitaminosis, the hypoproteinemia, the deficiency of hemoglobin, and the peripheral edema, all speak for the severe systemic changes of a highly destructive disease process.

Important metabolic disturbances are so closely related to the nutritional imbalance in these patients that it is difficult to discuss one without the other. Many clinical observations of these changes have been made. Groups of patients have been studied intensively, and it has become apparent that the metabolic dysfunctions directly parallel the severity and destructiveness of the disease. The urinary excretion of 17-ketosteroids gives a good indication of this. In the very advanced cases, and particularly in children who have had the disease since the age of five years or before, it is fairly common to find no measurable excretion of 17-ketosteroids. In these children, too, there are failure of growth, lack of development of the secondary sex characteristics, and pseudodwarfism as experienced in some other very debilitating illnesses which attack children in early life. The figures for the urinary corticosteroids are not as striking as those for the 17-ketosteroids, but the preponderance of increased excretion of corticosteroids appears among patients in the severely ill group. The epinephrine test for adrenal reserve function showed abnormal and at times questionably abnormal response in the gravely ill patients. Posey, Mathieson, Mason and I^{32} found a rough correlation between the degree of clinical severity and the response to the epinephrine test.

Basal metabolic rates in patients who have ulcerative colitis even of the severer types are rarely changed. The serum potassium in these cases is frequently reduced, and figures as low as 2 and 2.5 mEq. per liter are fairly common. In such cases, too, electrocardiographic changes will be observed. Reduction of serum calcium and phosphorus occurs. Demineralization of bones may be observed. Sometimes reduced values of serum calcium are such that episodes of tetany are described. Alkalosis, hyponatremia and hypochloremia are fairly common in the very sick patients. Cortico-adrenal functions may be disturbed in some forms of ulcerative colitis even when the patient is ambulatory. It is, however, quite probable that such impairment will develop if the patient is severely ill. The delayed convalescence common to many of these patients may be at least partially the result of inability to synthesize body tissues from ingested proteins because of lack of proteolytic and antiproteolytic steroids elaborated by the adrenal cortex. It may be that the deficiency of potassium in these patients contributes greatly to their weakness and asthenia.

Associated with these changes, there may be demonstrable pathologic renal changes. In a group of sixty cases of chronic ulcerative colitis in which necropsy was performed, an endothelial proliferation in the form of glomerulonephritis occurred in 70 per cent of the cases. Endothelial proliferation of a high degree with swelling appeared to cause obstruction to the flow of blood in the glomerular capillaries. There was a distinct relation between the degree of endothelial proliferation and the degree of activity of the colitis. The highest degree of proliferation occurred in cases of thromboulcerative colitis. Other renal changes, such as tubular degeneration and necrosis, occurred in a fourth of the cases. Deposition of calcium in the tubular epithelium occurred in a fair percentage of the cases. Acute pyelonephritis occurred only occasionally. After ileostomy there was a tendency to an increase in the renal mass. Formation of renal calculi following ileostomy is also of some interest. These and many other observations emphasize the serious destructive nature of the condition commonly called "ulcerative colitis."

Comment

An attempt has been made to summarize our knowledge of today regarding the inception of ulcerative disease of the digestive tract. The nature of these ulcers and the varying characteristics in different portions of the digestive tract have been mentioned. The results of such ulceration on nutrition and subsequent bodily economy have been detailed with particular reference to interference in nutrition in the intestinal tract. Many important nutritional and metabolic disturbances occur in ulcerative disease of the small intestine, even when the disease itself involves a relatively small portion of the intestine. It is important to keep this in mind in any program designed to control the nutritional disorders which occur as a result of ulcerative disease of the digestive tract.

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The Challenge of Recent Concepts in Breast Cancer

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DURING the past few years attempts to extend the scope of operations for carcinoma of the breast based on more careful study of lymph node spread to the internal mammary and supraclavicular areas have greatly stimulated interest in the disease. Radical mastectomy with or without post-operative x-ray therapy had come to be accepted as the proper treatment for primary operable lesions. Now we are confronted with the challenge on the one hand that classical radical mastectomy may be denying certain patients the opportunity for cure that operations of greater scope might afford and on the other hand that unnecessary operations are being performed on patients in whom metastases have already spread to nodes beyond the axillary group although not clinically demonstrable. The challenge to the well ensconced concept that radical mastectomy is an adequate operation has initiated such keen interest because cancer of the breast is the most common type in women, accounting for 21 per cent of cancer cases and approximately one third of cancer deaths in women.

Diagnosis

Earlier diagnosis has been generally accomplished in recent years chiefly because women have become cognizant of the importance of periodic examination both by themselves and by their physicians. Adair found that at Memorial Hospital the primary operable cases rose from 23 per cent in 1920 to 80 per cent in 1951. The very excellent film on breast self-examination being shown to women's groups by the American Cancer Society is exerting an ever increasing favorable influence. Physicians likewise are recognizing the importance of prompt excision of the solitary breast lesion particularly in women forty years of age or over.

A small early malignant lesion is not likely to demonstrate any of the classical signs. It may be fairly movable; the only highly suspicious sign may be the presence of induced skin retraction although this sign may accompany other lesions. Nearly half of the lesions will be in the upper outer quadrant. Only about 17 per cent or less will be in the inner half of the breast.

Aspiration biopsy for diagnosis has been employed with a high percentage of success by those who have become proficient in the technique and in the hands of pathologists trained in cytological diagnosis. It is at times a rather painful and unappreciated experience for the patient and is not without potentiality for error. The author encountered such a case in a patient with a lesion of the upper outer quadrant 4 centimeters in diameter which demonstrated induced skin retraction. Aspiration biopsy was not done but at local excision a cystic lesion was found which the pathologist, on examining it grossly in the operating room, believed to be a thick-walled cyst and did not submit it to frozen section. The paraffin sections showed a medullary carcinoma. It is conceivable that had one obtained fluid from this lesion on aspiration he might have been misled into believing it to be a cyst. However this error would have been unlikely in this instance since the patient was beyond the menopause.

Preoperative chest x-ray is mandatory but it seems reasonable to limit x-ray examination of the spine and pelvis to those patients having pain referable to these areas.

Criteria of Operability

The determination of operability varies considerably among surgeons. The author agrees essentially with Adair who contends that a generous attitude toward operability be taken in contradistinction to the classification of Haagensen and Stout which is relatively restrictive. Adair defines three types of inoperable cases: (1) those with distant metastases, (2) those with an inflammatory lesion and (3) those with supraclavicular metastases. Consequently patients with ulcerative lesions, satellite skin nodules, fairly extensive skin edema, and associated pregnancy need not be excluded from the operable group. In a series of 130 cases of primary breast cancer associated with pregnancy Adair has found a five-year survival of 44 per cent; in cases in which disease was limited to the breast 71 per cent survived five years, and in those with axillary metastases 27 per cent survived five years. Thus a patient with disease confined to the breast has nearly as good a prognosis as the patient without associated pregnancy. Abortion in this group has resulted in a five-year survival of 70 per cent;

the unaborted showed 44 per cent five-year survival.

Intensive radiation to a patient with inoperable disease because of extensive edema or large relatively fixed axillary nodes may produce such marked regression that the author believes cases responding favorably should be considered for subsequent radical mastectomy.

Treatment

For carcinoma, which is clinically operable and potentially curable, radical mastectomy following diagnosis by excision, incision, or aspiration biopsy is the widely practiced method of treatment. Postoperative roentgen therapy is employed in a variety of ways and with varying techniques. It would seem most feasible in our present state of knowledge to give routine postoperative therapy to all patients in whom axillary metastases have been found, irradiating intensively to the supraclavicular and internal mammary chain areas with less intense irradiation over the operative area of the chest wall. Because of an incidence of recurrence of 5 per cent or less in the axilla it would seem preferable not to direct a portal to the axilla as subsequent fibrosis may cause arm edema. Local recurrence in the axilla can then be treated either by intensive localized roentgen therapy or local excision.

A very provocative report was made in 1943 by McWhirter who treated a series of patients by simple mastectomy followed by intensive roentgen therapy to the axilla, supraclavicular and internal mammary areas. He attained a five-year survival rate comparable with the average five-year survival of series of patients treated by radical mastectomy. This method of treatment has basic defects in that it leaves behind tissue which is surgically accessible and that it does not conform to the soundly established principle of surgery for cancer that an adequate operation entails the bloc removal of the primary tumor, intervening lymphatic channels, and the primary lymphatic drainage area. To leave such tissue behind for treatment by irradiation invites the danger of only arrested growth of cancer cells rather than complete destruction. Thus it seems advisable to wait for a longer follow-up by treatment of this type before seriously considering it in preference to radical mastectomy. In advanced cases however this method certainly has a place in treatment.

Principally as a result of the report by R. S. Handley and A. C. Thackray which showed the frequency with which metastases occur in the internal mammary lymph nodes we have been stimulated to reappraisal of the indications for radical mastectomy and investigation of extended operations. Handley's most recent report of internal mammary biopsy in 125 patients showed that in thirty-nine patients, or 31 per cent, the internal mammary nodes were invaded. Of the forty-eight patients with lesions of the inner half of the breast twenty-nine patients, or 60 per cent, showed internal mammary node metastases, while of the seventy-seven cases involving the outer half of the breast fourteen patients, or 18 per cent, showed invasion of the internal mammary nodes. These figures represent the minimum incidence of metastases since it is possible that metastases which could not have been detected at biopsy were pressent in some instances. The important fact these data show is that in six out of ten radical mastectomies done for inner half lesions one cannot expect to be performing a curative operation.

The arc of lymphatics extending around the periphery of the breast, the axillary, supraclavicular, and internal mammary groups are in close anatomical relationship as McDonald, Haagensen, and Stout recently emphasized. They carried out a most important study by biopsying the supraclavicular nodes lying between the subclavian and jugular veins as well as the internal mammary nodes before determining operability in patients who fell into the following categories: those with clinical axillary metastases, those with large tumors in the center of the breast and all those with tumors of the inner half and in patients with such extensive local disease that operability was doubtful. Thus they perform a triple biopsy, first the primary lesion, second the internal mammary chain including the second, third and first interspaces in that order, and third the medical supraclavicular area. They found metastases in both the internal mammary and supraclavicular areas in eight of thirteen cases studied and conclude that block removal of the internal mammary chain with radical mastectomy as practiced by Urban and Sugarbaker is not justified unless supraclavicular biopsy is negative and that metastases present in both locations indicate inoperability.

Wangensteen has been very energetic in his efforts to extend radical mastectomy to include a removal of the supraclavicular, superior mediastinal and internal mammary nodes.

It is of course too early to draw any conclusions until five-year results are available from clinics investigating large series of cases along these lines. However it does seem as McDonald says that if positive nodes are found in the first interspace the outlook for cure is very unfavorable even if no positive nodes are found in the supraclavicular area.

In regard to the resection of the chest wall in continuity with radical mastectomy and placement of *fascia lata* into the defect as done by Urban the author has found it desirable for a lesion of the medical aspect of the breast to employ a transverse incision and not to mobilize the opposite breast toward the midline. If this is done the cosmetic result with an artificial breast brassiere will be more nearly normal.

Palliative Therapy

Roentgen therapy for locally inoperable lesions frequently gives long periods of arrest of the disease. For movable ulcerative lesions for which radical mastectomy is contraindicated for other reasons simple mastectomy combined with roentgen therapy would seem to be the preferred treatment in order to eliminate the unpleasant effects of radionecrosis of the lesion. Marked relief of pain in osseous metastases is obtained in a high percentage of cases with roentgen therapy.

Hormone therapy is used as androgens in patients under sixty and estrogens in patients over sixty years of age. Relief of pain is obtained from each in approximately sixty per cent of cases for a period of from six to eight months. The side effects of testosterone of hirsuitism, edema, voice change, and acne are less marked with stanolone which is given in the same dosage as testosterone propionate, 300 mg. a week intramuscularly. Although it may be given for five months or longer Adair has recommended a ten-week period of intramuscular testosterone propionate for a total dose of 3 grams followed by 60 mg. of methyl testosterone orally daily so long as relief is obtained. Estrogens are given orally as diethylstilbesterol, 5 mg., three times daily, or ethinyl estradiol, 1 mg., three times daily. Withdrawal uterine bleeding occasionally occurs.

Castration

The beneficial effects of castration are at times dramatic. The results from x-ray and surgical castration seem to be about equally effective causing up to 15 per cent improvement in advanced cases. It should also be employed in young patients with extensive axillary metastases.

Adrenalectomy

Bilateral total adrenalectomy as first reported by Huggins has given objective and subjective improvement in a gratifying percentage of cases for periods up to a year or longer. Replacement therapy with cortisone orally averaging 50 mg. daily has proved very satisfactory. The rationale for the procedure is that total adrenalectomy removes all known extragonadal sources of sex hormone. Unfortunately there are no known clinical, chemical, or histological criteria upon which prediction of response can be based. The operation is usually deferred until the patient has demonstrated failure to respond or release from favorable response to castration and hormone therapy.

Summary

Recent increased interest in carcinoma of the breast has derived from more careful study of lymph node spread to the internal mammary and supraclavicular areas and is causing reappraisal of the indications for radical mastectomy and has provided the basis for more extensive operations.

Increase in survival rates for radical mastectomy as compared with earlier years is due primarily to patient and physician awareness of the need for periodic examination.

Early lesions may exhibit no classical signs of carcinoma.

Criteria of operability should not be too rigid. The three recommended groups of inoperable patients are: (1) those with distant metastases, (2) those with an inflammatory lesion and (3) those who have supraclavicular metastases.

Radical mastectomy with postoperative x-ray therapy to the supraclavicular, internal mammary areas and chest wall for patients with axillary metastases is recommended for operable lesions.

Handley's demonstration in a series of 125 patients of invasion of the internal mammary chain in 31 per cent of the patients and in 60 per cent of forty-eight lesions of the inner half of the breast has stimulated attempts at more radical surgery. Continuity resection of the chest wall to include the internal mammary chain and the addition of supraclavicular, mediastinal and internal mammary node dissections are being done. Biopsy

(Continued on Page 460)

The Endocrine Management of Chronic Cystic Mastitis of the Breast

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THE RELATIONSHIPS between estrogen production and normal and abnormal stimulation in the body have been the subject for numerous investigations.

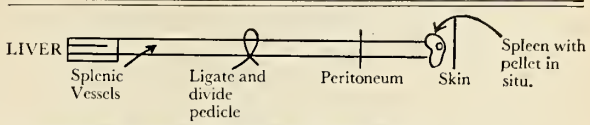
The elucidation of the metabolism of sex endocrine steroids has been intensively studied.[3] Previous observations have indicated that synthetic and naturally occurring estrogens are inactivated *in vitro* by the liver[34] and ketohydroxy estratriene was inactivated in a heart-lung-liver perfusion system, but not in a heart-lung system.[25]

In 1939 we devised a suitable technique for studying these problems in the intact animal.[2] When a pellet of estrone, estradiol or estradiol benzoate is placed in the spleen of a castrate rat; the steroid of necessity passes first through the liver before entering the systemic circulation. There is no demonstrable estrogenic effect, nor androgenic effect when using pellets of testosterone compounds in the spleen. Livers of male and female rats inactivate estrogens and androgens. Transplantation of the spleen subcutaneously with steroid pellet *in situ*, followed by ligation of the splenic pedicle after establishing collateral circulation, allowed return of the specific steroid effects. Many subsequent reports have confirmed this evidence of the ability of the liver to destroy estrogens and androgens.[20,29,30,33] (Table I.)

There have been many reports of hepatic lesions produced by nutritional deficiencies.[19,21,22,27,28]

We have previously reported effects produced by long-term stimulation of male and female rats with various sex endocrine steroids.[26] Biskind[11] found that castrate female rats with pellets of estrone in their spleens remained anaestrous when on a normal diet, but went into continuous estrus when the diet was depleted in the B complex vitamins. The addition of brewer's yeast or a mixture of crystalline thiamine riboflavin, pyroxidine and calcium pantothenate to the diet, restored the anestrous state. Depletion of the vitamins again led to continuous estrus. The inactivation mechanism in the liver bears no necessary relation to detectable morphologic changes, since impairment of this mechanism took place in livers appearing normal histologically, and inactivation occurs in livers with necrosis and fat infiltration.[5,6,7,8,11,13] Acute experiments in the rat show that thiamine and riboflavin alone of the B vitamin complex are adequate for hepatic destruction of estrogen.[29,31,32] Methionine also seems essential.[20,33]

TABLE I. CASTRATE FEMALE RATS



1. Subcutaneous pellets of estrogen produce estrus.
2. Implantation of estrogen pellet in spleen: anaestrous.
3. Estrogen pellet in subcutaneous spleen with collateral circulation and divided pedicle: Return of estrous.

Androgens, however, are readily inactivated by the vitamin B deficient liver. Therefore, an alteration of the estrogen-androgen mechanism may give rise to certain nutritional deficiency syndromes when this balance is altered.[9,10,12]

R. T. Frank showed the relationship of certain types of uterine bleeding, premenstrual tension and chronic cystic mastitis to excessive amounts of estrogens.[14,15,16,17,18]

There have been reports on the relation of estrogen to the menstrual cycle and to liver function which show that with increase in amount of body estrogen either cyclically during the intermenstruum or in the latter part of pregnancy, there may be a drop in liver function.[23,24] Delay of postpartum uterine involution, cystic mastitis and premenstrual tension occurs as a result of impairment of hepatic function with the associated increase in body estrogen.[4]

In summary, the impairment of estrogen inactivation by the liver results in retention of estrogen with alterations in the estrogen-androgen equilibrium. The clinical evidences of excess estrogen in the female are menometrorrhagia, premenstrual tension, cyclic painful breast enlargement and chronic cystic mastitis. In the male: testicular softening and atrophy, diminished libido and impotence, and gynecomastia. This latter condition has been reported to be quite common among the troops in the Pacific, who as prisoners, had very poor diets. The condition responded to dietary treatment.

In the same way, one postulates the developments in chronic cystic mastitis, of continuous

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TABLE II.

No.	Age	Color	Marital Status	Complaints and Findings	Treatment Begun	Results
1(FC)	32	W	M	Painful breasts, diffuse bilateral disease.	10-14-49	11-4-49 breasts softer, no pain; 11-25-49 soft, no pain; 2-1-52 1½cm nodule L. breast, no pain.
2(VD)	41	W	M	Solitary tender nodule R. breast. Biopsy.	5- 3-49	Re-exam. '49, '50, '51, '52, no nodules, no pain. Recurrence of nodule upper quadrant right breast.
3(FG)	48	W	M	Painful tumor L. breast. Biopsy.	7- 3-50	Re-exam. '50, '51. Improved, no pain, or nodule.
4(VH)	46	W	M	Excision cyst L. breast '48, painful new cyst L. breast '50.	5-12-50	Observation for 6 mo., marked improvement.
5(MH)	29	W	M	Diffuse severe cystic mast., bilateral cyst L. breast.	3-10-49	Decrease of pain and nodularity. 2-25-52 Re-exam. Pain before periods. Responded to treatment.
6(EH)	23	W	M	Aching, diffuse mild changes.	11-25-49	12-7-49 still lumpy; 1-11-50 improved.
7(MH)	48	W	M	Biopsy for bleeding L. nipple 7-11-50. Bilateral cystic disease.	7-12-50	Treatment, Vitamin B and Liver. Re-exam. 3-1-52 improved.
8(EK)	33	W	M	7-23-49 Aching both breasts for two yrs. Bilateral disease.	8- 8-49	Vitamin B and Liver. Re-exam. '49, '51, and last 2-16-52. No complaint. Normal breasts on palpation.
9(EM)	39	W	M	Painful lump L. breast. Biopsy 11-5-51 Mastitis.	11- 5-51	Vitamin B and Liver. Breasts negative on exam. Rx used only for pain. 2-23-52 Re-exam.
10(VP)	21	W	M	Fibrocystic disease painful. Biopsy of nodule L. breast 4-9-48.	6- 1-49	Vitamin B and Liver. Exam. 3-1-52 normal. Asymptomatic
11(CB)	21	W	S	Diffuse disease both breasts. Painful 10-24-47.	9- 1-49	Vitamin B and Liver. Complete relief in three weeks.
12(AY)	36	W	M	Painful masses L. breast 4-6-51.	4- 6-51	Vitamin B and Liver. Complete relief.

cyclic stimulation of the breasts for many years which leads to localized hyperplasia of the glands and ducts, associated with irregular scarring or increase of fibrous tissue. These, too, may undergo malignant changes. A study by Ayer reports on the relation of thiamine deficiency, high estrogen and uterine cancer.[1]

I am reporting a series of women with chronic cystic mastitis of the breasts who were treated on the basis of these observations, with large doses of vitamin B complex and liver. The doses prescribed were one tablet vitamin B complex* three times daily, and one tablet of liver concentrate† or twelve brewer's yeast tablets divided throughout the day. In addition, the patients were placed on a diet high in vitamin B and liver.

Treatment at first was intensive for two to three months with recurrence of pain in many cases after discontinuing the therapy. Relief occurred promptly (three to four weeks) with resumption of therapy. Diet too must be closely supervised. None of these patients have developed breast malignancies while under my observation. Biopsy should be done in cases of suspicious solitary nodules and subsequently an occasional suspicious area in the breast may warrant biopsy (Table II).

This diagnostic procedure should not, therefore, alter the basic concept of the causative factors in the production of this disease. Malignancy can, of course, occur in these breasts in slightly greater frequency than in normal breasts, but we do not feel that surgery of any other kind is indicated in the management of diffuse cystic mastitis. The isolated nodule in the breast is, by and large, cause for greater concern in differential diagnosis.

Frank[16] does not concur with Lewis and Geshickter's use of estrogens in chronic cystic mastitis. One is not only forced to conclude that estrogens are not the treatment of choice, but they may be exceedingly hazardous.

*Combex Kapseals (Parke Davis); Vit. B_1 (thiamin hydrochloride) 10 mg. Vit. B_2 (G) (riboflavin) 10 mg., Pantothenic acid (sod. salt) 3 mg. Nicotinamide 10 mg., liver concentrate N.F. 0.19 gm., liver fraction #2 N.F. 0.19 gm.

†Livibron Kapseal (Parke Davis); Liver concentrate equiv. to 2.5 gms. fresh liver, Vit. B_1 1.25 mg., Vit. B_2 0.5 mg., Ferrous sulfate 3 gr., Manganese citrate (sol) 1/16 gr.

Summary

The experimental background has been sketched which shows that the liver inactivates estrogens and androgens; that the vitamin B deficient liver will not inactivate the physiological effects of estrogens but continues to inactivate the androgens. Therefore, the estrogen-androgen equilibrium in the body is altered by nutritional deficiency which impairs the liver's ability to destroy estrogens.

A number of conditions can result from this imbalance and can readily be corrected by adherence to a regime which maintains large doses of liver and vitamin B compounds and a vitamin B and liver rich diet.

A series of cases of chronic cystic mastitis who have responded to this type of management is reported.

It is suggested that this regime is important enough to warrant its inclusion in the therapy of this and related conditions since accumulating experimental evidence makes it seem probable that continued accumulation of excess estrogens in the human body over a long period of time may be a responsible etiological factor in the production of

neoplastic changes in the breast, cervix and uterus.

Certainly because of the use and abuse of estrogenic substances in patients with endocrine abnormalities, one should take cognizance of the known facts about possible failure of inactivation of these hormones under certain situations of vitamin B deficiency or liver disease.

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EARLIER DIAGNOSIS OF GASTRIC CANCER

(Continued from Page 398)

With full respect for the improvements in the techniques of surgery and its allies, the hope for significant improvement in the salvage rate from this disease rests with its earlier recognition.

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The Use of Radioactive Isotopes in Diagnosis and Treatment of Neoplasms

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RADIOACTIVE isotopes have been available for research purposes for approximately twenty-five years but until the advent of the nuclear reactor the isotopes were few in number and even less in quantity. Despite these handicaps, sufficient basic work was accomplished by numerous investigators to the end that when isotopes became available in reasonable quantities through the auspices of the Atomic Energy Commission it was possible to put them to clinical use.

In selection of a radioactive isotope for either diagnostic or therapeutic purposes, there are three general points to be considered.

A. The energy release of the radioactive atom when it disintegrates must be of such an order that it is effective therapeutically or, if used for diagnostic purposes, can be measured outside of the body by a Geiger-Mueller counter.

The break-down of a radioactive atom may result in release, either alone or in combination of alpha particles, beta particles or gamma rays. The alpha particles are relatively large with a very short range in tissue or air and do not penetrate beyond the skin. Hence these are of little clinical value. Beta particles are more penetrating and those of high energy as well as the gamma rays may be detected externally.

B. The rate of disintegration of the radioactive isotope must be within reasonable limits.

Some radioactive isotopes disintegrate so rapidly that their half-life is measured only in minutes or seconds. Obviously they are of limited practical use. On the other extreme, some disintegrate so slowly that amounts used for diagnosis or treatment subject the body to irradiation which, over a long period of time, exceeds tolerance limits.

C. The radioactive isotope must be utilized by the body in such a manner that the desired diagnostic information may be obtained or a limited area subjected to internal irradiation.

For these reasons the number of radioactive isotopes suitable for clinical use at this time is limited. In the future considerable increase may be expected as development of isotope-labelled compounds progresses and as more elements become available.

Radioactive phosphorus (P^{32}) has been used successfully in the treatment of polycythemia vera inasmuch as it selectively concentrates in bone marrow, liver, spleen and lymph nodes. Use of this radioactive isotope in leukemia, lymphosarcoma and Hodgkin's Disease has not shown any advantage over conventional radiation therapy although it may be used as an adjunct. Concentration of P^{32} in neoplasms may range from two to five times that attained in similar normal tissue and while this is insufficient for effective irradiation therapy, it does allow for differential diagnosis of benign and malignant tumors and for localization of neoplasms. It is used for localization of breast, brain, retro-orbital and testicular neoplasms and for differential diagnosis of mediastinal masses. P^{32} has no gamma radiation and has a short beta particle range. These characteristics make it available as a source of local irradiation of skin cancers, hemangiomas, hyperkeratoses and verrucae.

Radioactive iodine (I^{131}) is one of the most useful isotopes. It emits both beta particles which provide a good local irradiation effect and gamma rays which allow external localization and quantitative determination with a Geiger-Mueller counter. Iodine^{131} is used in tracer quantities to determine thyroid function and in larger amounts for treatment of hyperthyroidism. It is useful in preoperative diagnosis of thyroid carcinoma and in localization of metastases. Following surgical removal of the primary cancer of the thyroid, radioactive iodine may be used for treatment of metastases having follicular, alveolar, or papillary follicular architecture. Hürthle, papillary, squamous, and anaplastic types of carcinoma do not concentrate iodine well.

After inactivation of functioning thyroid tissue by anti-thyroid drugs, surgery or irradiation the metastases may assume function and develop a good iodine up-take. Under these circumstances, radioactive iodine is useful as a palliative measure. It is also of value in cases of thyroid neoplasm where definitive treatment cannot be used.

When radiactive iodine, as diiodofluorescein or iodinated human serum albumin, is injected intravenously it crosses the blood brain barrier at points of damage due to brain tumor tissue and enables external localization of an intracranial neoplasm. This is a useful adjunct for localization at surgery.

Radioactive iodine is also of value in diagnosis of mediastinal masses, especially when used with radioactive phosphorus to differentiate neoplasms of the lymphoid system from retrosternal thyroids.

Radioactive gold in colloidal form is used to control pleural or peritoneal effusions caused by metastatic carcinoma. It will destroy free cancer cells in the effusion but has little effect on the larger implants. Its effect apparently is due to fibrosis of the endothelial areas. Radioactive gold colloid is also used interstitially for treatment of advanced carcinoma of the prostate. Solid radiogold has been suggested as a replacement for radon seeds but as yet this is not economically feasible.

Radioactive cobalt (Co^{60}) is an excellent source of gamma radiation and may be used in place of radium for interstitial and intra-cavitary irradiation. Its radiation is equivalent to that of a 2.5 or 3 million peak voltage x-ray machine and for this reason cobalt irradiators have been developed for super voltage x-ray therapy. Several of these are now in use and aside from economic factors such as decrease in space requirement and expense of installation and operation, have little apparent advantage over super-voltage x-ray machines.

As yet no good selective radioactive element or compound has been discovered for treatment of bone tumors. Radioactive phosphorus is relatively non-specific, radioactive gallium is toxic and has a short half-life. As yet radioactive yttrium, although a "bone seeker," has not been shown to have specific localization in neoplastic tissue. With continuing research in this field there is no doubt that a suitable "tagged" compound or element will be forthcoming.

Boron concentrates in certain brain tumors, especially glioblastoma multiforme. This fact combined with the ready capture of thermal neutrons by boron has placed the isotope factories—the nuclear reactors—into the field of therapy. Inasmuch as a closely available reactor is required it is doubtful if this will assume general use for some little time.

During the period that radioactive isotopes have been readily available, their use in diagnosis and treatment has become firmly established. In the future, with development of new "tagged" compounds, their value will undoubtedly increase. To enable the full utilization of this new clinical tool it is necessary to establish adequate isotope laboratories not only in large teaching institutions but also in the smaller hospitals serving lesser concentrations of the population.

PROBLEMS OF NUTRITION IN ULCERATIVE DISEASE OF THE DIGESTIVE TRACT

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Rehabilitation of the Abdominal Cripple

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PERHAPS THE GREATEST forward movement in medicine in the past decade has been in the field of rehabilitation. While much attention has been directed toward the salvaging of war and civilian casualties, it is timely to point out that very little has been done to aid the hundreds of unfortunate cripples who are the direct result of repeated abdominal surgery.

That these patients are truly cripples can be attested by anyone who has ever seen one of these thin, emaciated, constipated, apprehensive persons who is afraid to eat too much, or afraid to miss his dose of laxative lest he bring on another attack of grinding abdominal pain, obstruction and another operation. These people are haunted by the constant fear of more surgery.

Certainly the profession can point with pride to the work of such men as Rusk, Covalt, Kessler and others, in the rehabilitation of war-torn bodies, paraplegics, amputees, et cetera, but at the same time the number of these patients is actually small when compared with the almost countless intestinal and abdominal wall cripples resulting from repeated operations. Many of these are the direct result of the very operation designed to help, namely, the simple lysis of adhesions.

Covalt, Cooper, Hoen and Rusk in a recent article in the *Journal of the American Medical Association* point out that in the last four years at their Institute of Physical Medicine and Rehabilitation at New York University Bellevue Medical Center, more than 400 paraplegic patients have been hospitalized. This, of course, does not mean that a great many other patients have not been presented for rehabilitation, but it does help to point out the very insignificant number of these patients when compared with those subjected to various kinds of abdominal surgery.

A recent check of one of our local hospitals of only 240 beds, shows that last year 1,108 abdominal operations were done. Over a four-year-period comparable to the New York study the figure is 4,165. If only a small percentage of this group returned for surgery, the figure would be interesting and not a little frightening because it is a well-known fact that not all adhesions are lysed or even reported at second operations supposedly done for other pathology.

With the aid of more and more antibiotics, better anesthesia, better nursing care and more adequate equipment of every kind, men are losing their fear of abdominal surgery and it is not uncommon to find those with little or no training attempting all types of major abdominal work. It is true that most of these patients do survive, but little has been written about the appalling aftermath of abdominal surgery. As I have pointed out in a previous paper, very few present-day surgeons pay any attention to the causative factors of intraabdominal adhesions and as a result more and more are being created every day in our hospitals.

Every operating room supervisor is familiar with the usual routine of steep Trendelenberg positioning, hot gauze sponges, huge self-retaining retractors, rough handling, inadequate hemostasis, drying exposure, et cetera, all of which along with the ever-present danger of infection, add up to disaster in the form of postoperative adhesions.

It is not uncommon to learn of as many as eight or nine abdominal operations on the same patient, all but the first being done for the relief of adhesions. I have recently operated on two cases, one of them had five previous major operations, and the other seven. Each had a story of repeated obstruction.

With this background it becomes pertinent to review the actual facts regarding intestinal adhesions and what can be done about them. First it is imperative that every surgeon be made aware of the injury he may unwittingly inflict while doing abdominal surgery, and secondly, every man must know how to meet this problem when he is confronted with it at a later operation.

As long ago as 1917, while in the military service, Dr. T. B. Noble, Jr., Indianapolis, became interested in the problem of perforating gunshot wounds of the intestine and noted that most of these cases died whether they underwent surgery or not. At autopsy, he noted that there was "tremendous segmental intestinal distention due to multiple obstruction and widespread destruction of the peritoneum." The erroneous idea at that

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time, and still widely prevalent, was that in the face of spreading peritonitis, nothing should be done and that abscesses formed during the course of acute intra-abdominal infection could not be molested or drained.

In 1920, Dr. Noble devised his operation of intestinal plication and in 1933, while first working with him, it came to my attention. Since that date working both with Dr. Noble and alone, I have had the opportunity to see and do several hundred of these operations which is the only one yet devised to offer any hope to these hapless individuals who have the misfortune to have recurrent intestinal adhesions.

Although Dr. Noble has written extensively on the subject, and I and some of his students have used the procedure successfully for twenty years, it is only recently that any real notice has been given to the operation. In the January, 1953, issue of *The American Surgeon* there is a splendid paper on the Noble Plication procedure as used in forty-seven cases in the Department of Surgery at the University of Texas. Their experience has been uniformly good.

In discussing the subject of intestinal adhesions, it is hardly necessary to review the pathology involved, but suffice it to say that in spite of every modern procedure and medication yet devised, adhesions do occur and re-occur following lysis, so that these patients become more and more disabled as time goes on. Finally they become obstructed, sometimes completely, and again present themselves for surgery. They are by now abdominal cripples and definite subjects for rehabilitation. Hardly a day passes in our hospitals that a case or two is not scheduled "Lysis of Adhesions," yet no mention is ever made of any procedure for the prevention of the recurrence of this disabling condition nor of any plan for the rehabilitation of the abdominal musculature which is so badly disabled many times by repeated incisions.

The Noble Plication operation offers the only means of rehabilitating these abdominal cripples. The procedure is simple and while it does not nor cannot prevent the recurrence of adhesions, it does very definitely change the picture of uncontrolled to controlled adhesions. In other words, the

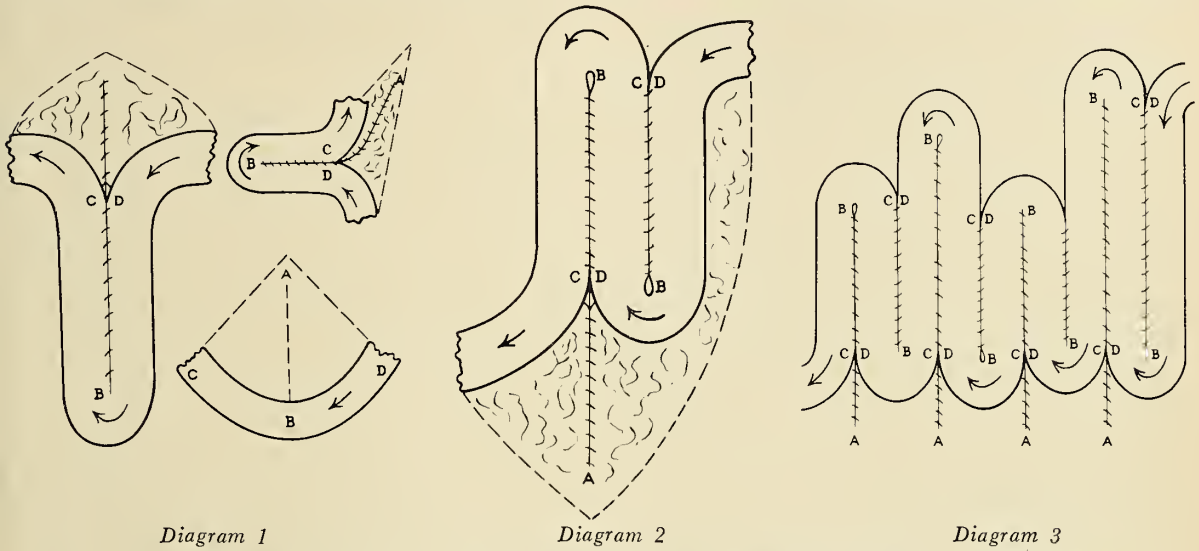


Diagram 1 *Diagram 2* *Diagram 3*

Fig. 1. The single unit of plication is the basis for all plication. Multiple plications are simply single units added to others. In Diagram 1, it will be seen that any loop or section of small bowel may be picked up and folded. As this is done the mesentery will fold, of course. A point, A, is taken at the end of this mesenteric folding, and this for our purpose may be taken as the surgical root of the mesentery, although it is not the anatomical base or root of the mesentery. At point A, if a suture is started, there will be no cavity left open for some other part of the bowel to enter or become caught. This point is chosen for this purpose alone, and will be called the point at the root of the mesentery with this understanding. A running suture unites lines or folds of the mesentery arbitrarily chosen from point A to the intestine, lines AC and AD in the diagram. These, when brought together, will close the mesentery completely. The suture is carried on down the intestine to the apex of the chosen wing, point B, or unit of plication. As shown, this may be closed tightly or left not quite tightly closed. Diagram 2 shows two single units combined into a three wing plication. Obviously points A are alternately on opposite side of the mesentery. Diagram 3 shows a multiple plication which can be carried the full length of the small bowel.[5] From Noble: The Treatment of Peritonitis and Its Aftermath. Published by A. V. Grindle, Indianapolis, Indiana, 1945.

bowel injured and denuded of its peritoneum cannot be prevented from adhering to an adjacent loop, but it can be made to adhere where and in the position the operator wishes, thus preventing further obstruction.

The operation consists of suturing the mesentery of the selected loop of bowel with a continuous fine catgut suture beginning at the base of the mesentery and continuing outward to the bowel. At the mesenteric border the suture can be continued in any fashion in order to cover the raw areas. It may be continued along the border or higher along the gut itself in a manner to approximate the loop in a single wing plication. If the single wing plication is not sufficient to completely cover the denuded bowel and further suturing is necessary, the plication can be continued in the form of multiple wing plications, folding the bowel back and forth as indicated in the accompanying illustrations.

Poth, Lewis and Wolma have included this clarifying description of the procedure in their recent paper. "The mesentery of a selected loop of bowel is sutured with a continuous fine plain catgut beginning at the base of the mesentery and continuing outward to the bowel. At this point the suture is tied in continuity and the stitch is continued to appose the bowel of the two limbs to form a unit wing of the plication. It makes no difference whether the suture is placed near the mesenteric border of the bowel or near its anti mesenteric surface."

I have found that the length of the wing which may be multiplied ad infinitum by folding another length of bowel alongside varies with the length of the mesentery. No definite rule can be established to determine the length of these loops. They must, however, be placed in such a manner that the point of flexion of the bowel is first at one end and then at the other end of the multiple plication. From a few inches to the entire length of the small bowel may be treated in this fashion depending on the need.

Since it is not the purpose of this paper to point out the uses of the operation in acute phases of peritonitis where it has been used very successfully, but rather to show its use in recurrent adhesions with obstruction, it becomes apparent that the most important phase of the operation is that of freeing the existing adhesions. For this operation we are assuming the absence of acute infection and thus the loops of bowel bound down by dense adhesions must be freed. In this part of the operation, I have found the use of a large pair of Mayo-Noble scissors to be an invaluable aid. With a little experience one can cut tissue paper thin adhesions with the blunted ends of the scissors without wounding the bowel. Once all the adhesions have been freed, the difficult part of the operation is over and the plication then can be carried out with comparative ease.

For those unfamiliar with the operation it is well to point out that the most potentially dangerous partial obstructions are those fixed to the root of the mesentery or to the rigid pelvic structures. Those in which the bowel adheres to an adjacent loop often take the form of natural wings of plication and many times these need not be disturbed. They are very infrequently the site of acute obstruction. In fact in my experience it is rare to find obstruction between loops of bowel which are free lying and not adherent to rigid pelvic structures or the abdominal wall.

Summary

1. The Noble Plication operation offers a solution to the problem of recurrent intestinal adhesions with bowel obstruction. It offers a positive means of controlling adhesions and rehabilitating the abdominal cripples who are so often seen following repeated abdominal operations.

2. The operation is not a difficult one and should be included in the armamentarium of every qualified general surgeon.

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810 American National Bank Building

Medical Maxims of an Internist

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EVERY PHYSICIAN who has enjoyed a quarter or half century of active practice sees about the same things and reaches nearly the same conclusions. These constitute the bedrock of medicine learned and relearned from error and misfortune since the time of Imhotep. They are textbooks that fit into the vest pocket and at the same time serve as tiny beacons to light the way.

Personal

Fame, wealth and power, few of us will achieve, but the profound respect of those whom we serve is more than adequate reward.

The medical meeting serves as a grindstone that keeps our wits sharp, fresh and alert.

The spoken word is equivalent in importance to the signature on a check. When given to the patient or fellow physician, it must be kept.

Haste is as guilty as overcaution in filling our cemeteries.

Recreation is the gyroscope that stabilizes the mind in its course through the angry seas of practice.

Less emphasis on tools, more on experience and judgment.

He who is bored with practice need but put his personal interest secondary to that of his patients.

When the patient dies, an unforgettable lesson is learned. The medical care of each case is to be carefully scrutinized before the death certificate is signed.

Treatment

Humility is a golden virtue, a potent therapeutic force.

Hope is the single thread that supports the ill patient—it is never to be severed.

If a patient falls out of bed after morphine, don't blame the nurse.

Medicines may be alarming poisons even if very dilute. The cautious physician reflects over their harmful as well as their wholesome effects.

The welfare of the patient is foremost.

When the physician has not seen the patient, telephone therapeutics becomes hazardous.

No morphine unless the diagnosis is clear.

Morphine puts three to sleep; patient, nurse and doctor, but awakens the undertaker.

The dose of a medicine is better less than more.

The kind, reassuring word of the physician is the fuel that keeps the spirit of an ill patient burning.

Don't hesitate to seek wise counsel; less haste, more thought.

A patient obtains most comfort from the expression of his thoughts.

Weighing facts at hand and impressions against a long accumulated personal experience, with the specific benefit solely for the patient—this is judgment.

Diagnosis

A diagnosis can be made at a single sitting but whether it takes a week, a year or even many years, TIME becomes the great diagnostician.

The genuine physician brings his bedside problems into the laboratory.

To give a differential diagnosis to an intelligent patient or his relatives is good medicine. To outline all possibilities of the course of an illness is also good medicine.

The adult patient seldom lies, a child almost never.

Diagnosis is the product only of a carefully reflected and comprehensive differential diagnosis.

If no diagnosis, return to the bedside often; sit at the patient's side and attentively watch the symptoms and signs, an hour, a day, or week, if need be.

It is a mistake to assume that the presenting symptom is the symptom originating alone from the basic disease. Such a symptom may be an embarrassing decoy.

No laboratory study can replace the time-honored thorough history and physical examination.

Is there any sound reason why medical men abhor the knife in assisting them in a diagnosis? Is an abdominal exploration less of a diagnostic procedure than a proctoscopy?

That treatment which is based on a solid diagnosis alone is most likely to be fruitful.

Intuitive diagnosis is primitive medicine.

The patient should be obliged to pay more for diagnosis than for therapy.

No therapy without a diagnosis and no diagnosis without a differential diagnosis.

Notes taken at the bedside in the home are an asset to the thorough physician.

The physician who attends a patient is a sentinel who watches the town. He cannot afford to sleep while on duty. Especially is this true in diabetic coma, where changes that occur in other diseases in one year, here occur in minutes.

A surprise awaits the clinician who observes his nude patient walk.

Let history taking be no less meticulous than the physical examination; about one hour for each. Of the history, half should be concerned with the emotional and mental.

Wise is he who obtains the history first from the patient and then from his relatives and friends, and lastly from the doctors who have previously given care.

To examine the chest thorough a slit in the shirt or the abdomen through a peephole in the waist is a crass affront to Laennec, to Auenbruggher, to Sydenham and to Hippocrates.

There are two occasions that demand nudity: the bath-tub and the doctor's examining table.

Autopsy

The physician can be satisfied with his diagnosis and content with his therapy only when the former is confirmed on the post-mortem table.

The physician's duty ends not with the death of his patient, but with the autopsy.

Consent for the post-mortem examination is obtained with the same determination as consent for a surgical operation; in the latter case the patient directly benefits; in the former, the physician.

Ethics

There is no room in medicine for an unkind accusation against a fellow practitioner.

Conduct

Participation in the post-mortem room, the pathologic and psychiatric conferences, the post-graduate courses and the experimental laboratory, the teaching of students and young physicians, the announcement of experiences by voice or by pen; a sound knowledge of past medicine as well as a thorough knowledge of the present; activity in community, church and political affairs, an ardent curiosity in cultural endeavors, pursuit of a personal hobby or recreative outlet, and constant devotion to his wife and children; these constitute the duties of an ideal physician.

Miscellaneous

That patient who weeps as he describes pain over the precordium is neurotic.

If a patient complains of a symptom or a group of symptoms referable to any organ over many years, that organ will eventually break down.

The very first symptom of a given complaint may be the most important. If, for example, epigastric pain, nausea and vomiting are preceded by headache, the latter is the cardinal symptom and is an expression of cerebral disturbance.

Vegetable life begins when the human spirit ends.

How frequent it is for husband or wife to follow his marriage partner to the gates of death with only a little space of time intervening!

When the patient has abruptly discharged his doctor, the doctor has not properly discharged his duties.

Face your blunders fearlessly.

The mature physician is never in a hurry, be it at bedside, consultation room, or operating room.

Patients teach good medicine to doctors eager to learn.

Conclusions

With the penetrating reflections of a philosopher, with the thorough planning of an architect, with the decisiveness of a general, with the tranquility of a priest, with the practical sense of a farmer, the physician is a unique individual forever tampering with the secrets of God.

1853 W. Polk St.

Adenocarcinomas, mixed salivary tissue tumors, and melanosarcomas are radioresistant and should be surgically excised. • • •

The five-year nonrecurrence reports of carcinoma of the tongue and floor of the mouth from larger clinics has been about 20 to 30 per cent.

The choice of treatment of intraoral malignant disease depends on the location of the tumor, its size, extent, histological classification, the age and general physical condition of the patient, lymph node involvement, and whether the treatment is to be curative or palliative.

A Sword Against Cancer

April is Cancer Month. It is a period when Doctors of Medicine promote, with more intensity than usual, the value of periodic health examinations in physicians' offices in the fight against cancer. It is a time when the public is made more conscious, by physicians and cancer control groups, of the seven cancer danger signals, of the need for semi-annual chest x-rays (especially in men over forty-five) in the war against lung cancer. April gives the opportunity to organize discussion groups and to hold panels on specific cancer problems in general practice, radiology, and surgery. These thirty days must set the pace for the other eleven months in acquainting people with the seven cancer danger signals. April is the time to increase cancer consciousness not only among the laity but among dentists and nurses who carry education to the people as M.D.'s do. This month the slogan, "Every Doctor's Office a Cancer Detection Center," must be crystallized so that it remains a reality for the entire year. This is the month when every county medical society must hold a scientific cancer program.

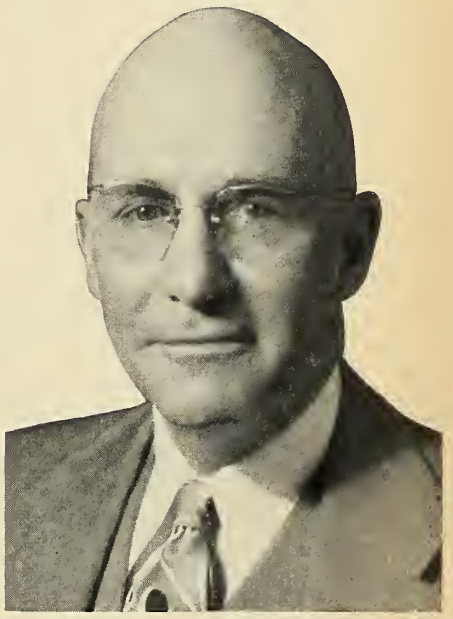
One great encouraging factor in Michigan's fight against cancer is the recent creation of the Michigan Cancer Co-ordinating Committee. This group is representative of six organizations interested in cancer control. In its several meetings to date, this committee has analyzed the situation, reviewed the several problems involved in cancer control in this state, and suggested the responsibility of each member-agency in the attack of each problem. The separated problems are: lay education, professional education, diagnosis and treatment, research, organization and campaign. To these may be added statistics, an annual financial report, and plans for the year ahead. We are encouraged with the formation of this very active cooperative committee. We believe that the fight against cancer will be highly stimulated with the advent of this six-pronged fighter in the field. We commend the Michigan Cancer Coordinating Committee and its efforts to your favorable consideration. We invite your help when this Committee calls upon you for advice and tangible support.

Every member of the Michigan State Medical Society can do something, day in and day out, to promote cancer control. Do your share of the work, especially when called upon by the newly formed MCCC, to the end that cancer's forward march of the last two decades is stopped.

L. W. Hull

President, Michigan State Medical Society

President's



Message

Editorial

SOCIAL SECURITY

THE MEDICAL profession must be interested in Social Security and what it will do to us. The first steps in this national philosophy came almost twenty years ago. The people were told that provision must be made for the future well-being of the underpaid working persons who, by the nature of things, could not provide for their own old age. At the same time, the whole nation was given a lesson in finance and economics which was a new concept. One could use his money as he earned it because Government would provide for his old age.

The nation was told the expense of the new program would not be too high, and would never be a burden. Why we were sold on that canard is a mystery. Many of us remembered the time a constitutional amendment was proposed allowing the federal government to issue a graduated income tax. Only a small amount—actually negligible—was asked, and there would be abundant money for the necessary governmental function. The tax would never become a burden. The tax has now reached a maximum of 91 per cent. We submit that it is a burden.

Why this reminiscing? Until now, the medical profession, and some others, by choice have stayed out of Social Security. We believed it to be not economically sound for our purposes. However, the President has asked its extension to cover all the self-employed. And the bill is likely to pass.

After twenty years of fighting, we are now faced with a practically accomplished fact. The plan has been used so long it cannot be abolished, even though it still has serious defects. The amount now being collected is 4 per cent of income, up to a certain income limit (now $3,600). Congress can increase that limit and is now considering making it $4,200. The amount paid is scheduled to reach 6 per cent soon, 3 per cent from the employee and 3 per cent from the employer. Splitting that tax was shrewd because the worker who is supposed to be the person to benefit, does not realize how much *he* is actually paying. What is to hinder Congress from making the income limit $10,000 or $20,000, or, as in the new Michigan Business tax, the complete gross income? As for the top limit, there actually is none.

This is a very unfair law. It provides "insurance" against old age and survivors' needs. Government calls it "insurance," but government does what no insurance company in existence can do. It takes away the benefits if, by chance or necessity, the aging person continues working and earns as much as $75 per month. This is unjust and unfair. Government profits from the work the old person does, government collects taxes from that work and from its products, and then takes away the old person's just benefits. We believe this restriction should be removed forthwith. It is inexcusable, and bad for morale. Some older people who work through necessity, do not dare accept a check for payment. They are afraid the check might be traced and the person's old age benefit cancelled. While this action defrauds the government, the government has "asked fur" just such a growing moral lapse.

The medical profession, lawyers, dentists, architects and other self-employed persons are in the same plight. The members of the medical profession very seldom retire at age sixty-five. Therefore, the law is stacked against us. It demands a tax for a benefit which the law itself prohibits us from enjoying. Last year, the American Medical Association surveyed many of its members to find whether there was a sentiment for this social security inclusion. The figures we do not have, but we understand the opinion was overwhelmingly against it. If Congress should include the self-employed professions in this great social evolution, we wonder what would happen to a member who refused to pay? Would the Supreme Court compel him to pay a tax for a benefit which the same law denied him?

Think it over, my friends, and write some letters. If the new law must come, let us be sure it is one from which we may benefit—and not be compelled to retire first. The country claims it needs more doctors, but this new law will force many into retirement—or the forfeiting of what is their legal due.

That law must be amended before it is passed—afterwards will be too late.

THE PRESIDENT'S REINSURANCE

THE ADMINISTRATION has not yet announced in any detail what it plans for its "reinsurance." We paid our respects to the Wolverton idea of the Administration's program last month. That scheme is completely unworkable, carries unacceptable controls, and would put the voluntary non-profit plans (to which it is limited) in a straight jacket. It is also a tax collection scheme.

We believe the President has something entirely different in mind. Blue Cross and Blue Shield are working with satisfaction throughout the nation. All the plans are successful in their fields of distribution. About 80 per cent of the people are able to pay the premiums needed to offer satisfactory health services. They could and would pay greater rates, if necessary or needful, to secure more complete care. We are not worrying about the 80 per cent.

A recent study showed that about 20 per cent of the people who go to hospitals are in need of some financial assistance, and are getting it, or the hospital and the doctor lose. The 20 per cent of lower-income or no-income people need attention, and are the ones with whom the government, federal or local, should be concerned.

We have suggested that if the government would recognize the insurance principle, this whole problem could be solved. Following Michigan's lead, the veterans have been cared for in the matter of service-connected disability, and in their own home towns by their own doctors. Nothing could have been more fairly done. Blue Shield and Blue Cross financed the VA program and refused to make a dollar profit. They feared federal subsidy. Government funds could be used to pay the premiums for the policies of the unemployed, indigent, or medically indigent. Those who could not pay all, or could pay some, could be assisted. Such aid could be done on a prepayment or postpayment basis. Government owes this care to its wards and could give these wards the same benefits that paying customers are getting.

Let government quash the subsidy and do business in a co-operative spirit.

Such a plan might be passing through the President's mind. To this could be added a catastrophe coverage, and all together would probably not cost the government as much as it is now spending to get inferior and insufficient care.

The old age, survivors, handicapped, and dependent children could all be covered.

This whole problem would take some planning, but nothing is impossible when there is a spirit of accomplishment. Government would have to forget its hankering to control everything. The Supreme Court could be by-passed by legislative action. We appreciate the fact that the major forces in government are now, in the strictest sense, bureaucrats, and such power must be brought under control.

The non-profit voluntary plans might also become bureaucratic, but they are separated into ninety-three units, and that in itself is an assurance of good internal functioning.

BLUE CROSS-BLUE SHIELD

FOR THE PAST few months "Golden Goose" meetings have been the rule over most of Michigan. Everyone knows the reason. Some faulty utilization of Blue Cross was found to be not only present, as we had all known for years, but was so prevalent it held a threat to the future welfare of our health service plans. Overuse means increased costs and higher prices for the premiums. Blue Shield has increased rates once since 1942, while Blue Cross has had several increases and is faced with another, if ways are not found to eliminate uninsured items, over-stay in the hospital, or too elaborate medication. The doctors themselves know what is wrong, and many of them have offered solutions at these meetings. We shall try to pass some along.

The most frequent suggestion is that minor surgery in the office be authorized. We send minor surgery patients to the hospital now and pay for it, but in addition—run up a hospital bill and use a hospital bed. Some time ago, Michigan Medical Service tried out certain minor surgery procedures in the office and found that the elimination of the hospital check-up, pathological report, and general supervision increased usage. Even if the cost is higher control is needed.

Others suggested a deductible plan, like automobile insurance, the patient paying the first specified amount, and the service plans paying the balance. That has been considered for years, and could be done, but that immediately throws a burden on the very persons who most need our protection—the low income group.

Another suggestion has been made; rewrite all

our policies making one to cover the minimum benefits that will give protection to the most people and make that rate as low as possible. Then offer to anyone who carries the basic policy, a number of riders. These riders can be so arranged as to cover any group of people, or any attention wanted. We could offer catastrophic coverage for anything desired; we could offer minor surgery in the office, physical and health examinations, all services in the hospital, unlimited x-ray, home and office visits. We could make the basic plan a deductible one with a rider that would cancel the deductibility. We could also offer a rider to take up the slack between the low $2,500 income rate and any higher income specified.

All these rider suggestions can be worked out. It is a question of using our experience and certain insurance "know-how." An element of guessing must not be forgotten, for there are no experiences to cover everything, as we found out fourteen years ago. However, much of this is being considered. Michigan Medical Service has appointed a committee to study our certificates, with a view to making whatever changes or recommendations may be found advisable.

We had a patient in the office a few days ago asking about the future of his Blue Cross certificate. He said he had been told the hospital plan was being "gutted" by unnecessary usage, and he wondered if he should change to some other form of insurance. We were able to show him that the plan is entirely solvent, has a good reserve, and can meet all just calls for service. It is not a question of losing our plan, but a question of not pricing it beyond reach of the comparatively small group who most need it. The average working man or professional man can afford to pay even higher rates, and he will, if necessary. Even if the low income person is frozen out by unwise procedures, the plan will continue, but that is not what we want.

The members of the medical profession and their hospital confreres are conducting a colossal social experiment in medical economics, have proved the insurability of health care and will continue their work. Changes will be necessary—more human charity and understanding.

Some of our doctors have given fifteen to twenty-five years in studying the economic and social aspects of the practice of medicine, and stand ready to continue their work We are receiving recruits by the score, and they too are inspired by a spirit of service. **This experience of medical economic accomplishment is as important as the great discoveries in science, but the rewards are more work for everyone.**

THE AMA AND THE AMERICAN LEGION

THE STAND taken by the House of Delegates of the American Medical Association on the hospitalization of veterans is that "all veterans with service-connected disabilities should be cared for at federal expense; also those with tuberculosis or neuropsychiatric conditions. Other individuals with general medical and surgical conditions not attributed to service should be taken care of just as any other indigent in the local community. Being a veteran does not result in a person's being anything but an ordinary citizen. Of course, Congress would have to change the law to put this into effect." Under present law, the actually medically indigent or those unable to pay are entitled to Veterans Administration care in the VA hospitals, if beds are available. Some states (Michigan) have laws prohibiting veterans becoming indigent. This situation has provoked many attacks, much acrimony and now a series of articles in the *American Legion Magazine*. This seems so uncalled for. Perhaps a few conferences could solve the misunderstandings. In Michigan, there has been no such controversy. For many years, a liaison committee, with William Bromme, M.D., of Detroit, as the medical chairman and representatives of the various veterans societies has been very active. A result of the fine feeling obtained is witnessed by the home-town and private physician care of service-connected veterans' illnesses, first suggested and originating in Michigan and known as the Michigan plan. Starting eight years ago and spreading over much of the country, the plan in Michigan is still running smoothly, having given our veterans $7,756,671.36 worth of home-town medical care. The program is stronger in Michigan than in any other state.

The *American Legion Magazine,* for two months, has listed cases in VA hospitals, which it claims the medical profession wishes barred from the hospitals, giving the gory details of non-service conditions and financial distress. We have carefully read each case, and have been unable to find one coming outside the provision of the AMA House of Delegates specifications.

The present laws were not made by the medical profession. The nonservice misuse is a development

now grave, with a tremendous percentage of the whole population being veterans. We do not believe the medical profession rightly deserves these insinuations and misrepresentations, nor should they continue. Some grave misunderstanding is evident in the Legion-AMA liaison†.

"DOCTOR SHORTAGE"

WE HAVE BEEN hearing from every direction the complaint of "not enough doctors." Probably every war of any magnitude brings the same wail from the civilian population which suffers when the doctors are called to the colors to care for the military. This, in a way, is as it should be. The military needs many times the number of doctors to care for a specific number of soldiers, and that is three or four times the needs of civilians in war or peace. In our most recent times, there is a question of where our greatest risk lies—in the military or in the defense of home areas.

World War I called for a goodly percentage of active doctors. World War II used almost half of our available doctors and necessarily left the home areas very short. During the inter-war years, there was very little complaint. Economic conditions were different than at any time ever known by almost half of the present profession—those with less than fifteen years of practice. During the great depression, doctors were waiting for the summons for medical care to patients, willing to make calls at any time, and used to accept any fee they could collect. People were sick, but had no money with which to pay. The doctor knew nothing about practice by appointment — with dates filled for three to six weeks. He knew nothing about a six-hour or eight-hour day of work.

World War II taught our younger medical men to expect limited duties, shorter hours, a suitable recreation period. The non-profit voluntary service plans made the practice of medicine something radically different from what our fathers in medicine knew. Now hospitalization of our patients and payment of bills for service are easily within the reach of well over 80 per cent of our population. All this makes for deliberate, unhurried, unworried, co-operative practice of medicine. The doctors have learned they are entitled to recreation, relaxation, and suitable limited working hours.

Such is the condition leading to public criticism of doctors at times when they are not in their offices, or not officially "on duty." The result is a widespread belief that there are too few doctors. Critics believe all that is necessary is to educate more doctors and the problems will be settled. Surveys in the profession seem to show that there are enough doctors, 220,104, or one to each 727 persons. No other nation, except Israel and her refugee physicians, has anywhere that number. In the United States, physicians are increasing faster than the population. A great influx of doctors, making for stiff competition, might silence the charge that doctors are difficult to find.

MEDICAL EDUCATION

WHAT is the truth about medical education and the number of doctors? During the past three or four years, the American Medical Association itself has contributed $2,000,000 to the nation's seventy-nine medical schools for use in educational purposes. At the same time, the private doctors and their friends have given about $5,000,000 to two great funds, the American Medical Education Foundation, founded by the AMA, and the National Foundation for Medical Education. This money has been distributed to the medical colleges. Many of the states, including Michigan, have student loan funds which are being used to educate students wherever we are able to find them, especially those promising to settle in rural areas (See Editorial JMSMS, January, 1954).

We all know the costs of medical education are high and the money very difficult to get from the state. The tax-supported sponsors of the whole educational system actually limit the number of students it is possible to accept.

The medical profession has two detractors. At the National Governor's Conference on Mental Health held in Detroit, February 9, 1954, Luther W. Youngdahl, United States District Court Judge, District of Columbia, former Governor of Minnesota, charged the medical profession with being a "closed corporation." He said, "It doesn't make sense. There are 100,000 young men and women who want to become doctors—and they'd make good doctors—but they won't get the chance. It

†The Michigan State Medical Society Executive Committee meets with the American Legion at their request on March 12, 1954—a future meeting at the time this editorial is written.

doesn't make sense." Governor G. Mennen Williams of Michigan is quoted as having said, "Perhaps we can ask the medical profession 'What's been happening about turning out doctors'? We find it exceedingly difficult to find an adequate number of doctors."

In Michigan, where this unfair and ill considered charge was made, the Wayne University Medical School has just moved into a $4,500,000 Medical Science Building, which will allow the school to expand her student list from sixty-eight to 100 admissions per annum. The State of Michigan appropriated most of this money and has paid part. Funds for the expansion of the faculty were contingent on the promise of accepting more students. Increased faculty funds were not available, so the school could take only seven more students which brought the number to seventy-five instead of the 100 promised, for whom there is room. Much credit must go to the untiring Wayne Alumni who raised nearly $200,000 toward a medical library.

On the University of Michigan campus during December, 1953, the $4,000,000 Kresge Memorial Medical Research Building was occupied. The new Medical Science Outpatient Clinic building has been occupied. Now under construction is the Alice Crocker Lloyd Memorial Radio Therapy Laboratory, a million dollar project. Two new teaching hospitals are open, and the student class has been increased from 150 to 200. The Legislature is being asked for a new Medical Science classroom building at Ann Arbor.

In the face of all this accomplishment, the medical profession is charged with being a "closed corporation," refusing applying students the chance to study medicine. Our two critics were a little out-of-date in their comments. Their information is not accurate, to use our kindliest words.

The general public are the ones who claim they need more doctors. All the state has to do to get more is to supply educational facilities. There would be enough applicants. It must be remembered, however, that medical education is a project which takes years to accomplish. Medical training facilities are slow in building, and a competent teaching staff is even more difficult to assemble.

All the records and all the facts credit the profession with seeking competent and suitable students and donating their full share towards supplying the facilities and faculties.

CIVIL DEFENSE

THE MICHIGAN office of Civil Defense has issued another section of its report. This is Annex VII, "Health Services," and consists of seven titles: Purpose, Assumptions, Definitions, Basic Policies, Organization and Responsibilities, Operating Procedures, and Appendices. Each one of these "chapters" is a detailed listing of every item available, or applying to that particular phase of the general topic of Civil Defense in the health field.

Section VII, Appendices, is divided into five sections with a sixth promised. Each of these units is again a complete and detailed listing of every segment of application in a logical and workable sequence. The topics are (1) Emergency Medical Service, (2) Public Health and Biologic Warfare Defense Service, (3) Radiological Defense Service, (4) Chemical Warfare Defense Service, (5) Mortuary Service, (6) Blood Service (to be submitted at a later date).

After reading this booklet of forty-three closely typewritten pages, with a carrying letter, we are struck with the utter impossibility of anyone not a medical man preparing such a text, yet there is no credit given to any medical worker. There is abundant reference to the work of doctors, and their need in carrying on the multitudinous duties which would be thrust upon us if we were to have a major distaster, especially an atomic or biologic war.

We remember the efforts made by the Michigan State Medical Society a few years ago, looking to the preparation for defense against an atomic war. We had a very active committee, headed by A. A. Humphrey, M.D., Battle Creek, who with the help of Traian Leucutia, M.D., and M. L. Lichter, M.D., of Detroit, collected thirteen papers bearing on Atomic Energy, and we published the first medical journal in history devoted to the subject of atomic energy, its use, effects, and defense. That was the March, 1951, number of THE JOURNAL, with several editorials by Dr. Humphrey and by the MSMS President, C. E. Umphrey, M.D. We were proud of that JOURNAL, its historic value, its cover—a sheet of black with white atomic energy chemical symbols and an atomic blast in colors in the center.

See letter to the Editor from Wayne L. Whitaker, Ph.D., Assistant Dean University of Michigan Medical School on page 442.

WHY NOT MAKE THE PRE-MARITAL PHYSICAL EXAMINATION LAW A HEALTH MEASURE OF REAL VALUE?

DO YOU KNOW, Doctor, that the State of Michigan's Pre-Marital Physical Examination Law states, "all persons making application for license to marry, shall at any time within thirty days prior to such application be examined for the existence or non-existence in such person, of any *syphilis, gonorrhea* or *chancroid.* Laboratory tests shall include a serological test . . . a dark field test when indicated . . . and a microscopic test for gonococci when indicated."

Obviously then, *a blood test is not enough.* The law clearly states *examinations, a serological test,* and *further tests where indicated.*

If, through the negligence of a thorough examination or of inadequate laboratory procedures, a physician permits an infected person to marry, that physician is legally responsible for the subsequent infection of the marital partner who may then take recourse to the courts.

Too few physicians take advantage of the opportunities afforded by the Pre-Marital Law. For possibly the first time, two young people may seek the advice of a doctor. They come to him for his opinion and approval of their right to marry. Far-sighted physicians will use this opportunity to establish a good rapport with these patients. The success of their marriage might well depend on the physician's findings and advice. He should not limit his examination to the presence or absence of venereal diseases but should thoroughly check all organs and systems so that chronic diseases, other communicable diseases, or congenital anomalies are known. One physician I know found an absence of a vagina during such an examination and had the opportunity to make an artificial one before the announced wedding day.

Often advice regarding sex hygiene or contraception is sought, or old superstitions or wrong impressions corrected, once a good patient-doctor relationship is established.

Let's make the law, which was established to prevent the transmission of venereal disease really work for the good of young people who might have their marriages fail, or be handicapped because of other communicable diseases, congenital defects, or lack of proper sex education. The Pre-Marital Physical Examination Law is a health measure of real value and can be made one of great scope.

ARTHUR C. CURTIS, M.D.

AN APPRECIATION

THE EDITOR wishes to express his appreciation to John M. Wellman, M.D., Lansing, who was appointed by the Michigan State Medical Society Cancer Co-ordinating Committee to assemble the material for the present Cancer number of THE JOURNAL.

He took over the task previously done for many years by F. L. Rector, M.D. Dr. Wellman has been untiring and prompt in his efforts, as witnessed by the very interesting list of papers on cancer presented in this number. We thank you, Dr. Wellman.

EPITHELIOMA OF THE ANUS

(Continued from Page 394)

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22. Tucker, C. C., and Hellwig, C. A.: Proctologic tumors. J.A.M.A., 111:1270-1273 (Oct. 1) 1938.
23. Wallon, E.: Epithelioma anal gueri par le radium apres derivation temporaire des Matiere. Bull. Soc. Frane. de Dermat. et Syph., 34:436-438, 1927.

If an increase in salvage rate is to be obtained, it is imperative that, occasionally, in patients whose clinical manifestations suggest cancer of the stomach but in whom no positive laboratory findings can be demonstrated, abdominal exploration be done to eliminate the possibility of a malignant lesion.

• • •

If the surgeon objects to performing a gastrectomy on the basis of symptoms alone and waits until results of laboratory studies are positive, it is likely to be too late.

• • •

In a series of 195 adenomatous gastric polyps, 35 or 20 per cent, were malignant.

• • •

Many surgeons believe that chronic gastritis is a precancerous lesion.

• • •

The first requisite for the correct diagnosis of any clinical entity is an awareness of the possibility of the occurrence of that entity, whether malignant or benign.

MSMS Friend "Grows Up"



Closeup of Tower

Michigan's Tallest structure is this new tower rising 1,057 feet above the terrain northwest of Detroit, according to its owner, WJBK-TV.

An old friend of Michigan State Medical Society has stepped onto Michigan television's highest pedestal.

The friend is Detroit's WJBK-TV.

The pedestal is the station's new million-dollar 1,057-foot tower, tallest structure in Michigan and just two feet short of the tallest tower in the world.

Its proud parents, while measuring its rapid growth, at the same time claimed another first TV step as their "baby" (born October 24, 1948) climbed into the 100,000-watt class to bring almost 1,500,000 families within the family circle of Channel 2. For the five-year-old, it meant new friends in Sanilac, Tuscola, Saginaw, Clinton, Eaton, Calhoun and Hillsdale counties in Michigan, seven counties in Ohio and a large area of Ontario, Canada.

From its early days, WJBK-TV, through activities of Gayle V. Grubb, managing director; Peter Storer, merchandising manager, and Kenneth H. Boehmer, public service director, has promoted MSMS interests. One such, the "Court of Health" (Sundays 11:00-11:30 a.m.), produced by the Michigan Health Council, has been a weekly public service feature since June, 1952. An earlier show, sponsored by MSMS, was on the air for more than a year before the time spot was relinquished to the Health Council.

In addition, Mr. Boehmer and others of the WJBK staff have contributed both time and experience to development of MSMS radio and TV projects elsewhere.

Other data on the new tower and transmitter: wind load—120 miles per hour; total weight—150 tons plus; weight of guys—42,000 pounds; actual height of tower—957 feet; antenna atop tower—101 feet; de-icing equipment; a one-man dumb-waiter extending through the center and to the top of the tower; emergency 200 kw Deisel driven generator capable of supplying full power (not just standby) in event of regular power failure; convertible to color TV.



Picture of Crowded TV Studio

It's Never Lonely in a television studio, no matter how secluded the performers may appear. Busy cameramen, sound men, and technicians swarm silently out of camera range to record the words and action being beamed to a large segment of Michigan.

Michigan Foundation for Medical and Health Education, Inc.

President's Annual Message to the Membership

By E. I. Carr, M.D., Lansing

In the formative days of this Foundation, the philosophy was preparation for financial security of an already and going program in health and medical education and for continuation and extension of postgraduate education. Research, student aid, and, in fact, broad concepts were included in the forward looking provisions, enumerated in our articles of incorporation. The amount of money assembled fell short of our hopes and expectations. Our quickly established, and our actual present worth, came largely within the first year of our existence. The continued and persistent publicity and several types of appeals by personal and printed effort have not elicited much response by money contributions from the profession.

This situation led your Trustees to conclude, nevertheless, that it was right and feasible to assume various responsibilities within the scope of the established purposes of the Foundation and to proceed as intended. We herewith present our obligations and commitments.

We have provided the total financial sponsorship of the past five annual Michigan Rural Health Conferences, limiting each to $2,500.00.

With counsel of a special credentials committee, composed of Doctors L. J. Hirschman, Claude R. Keyport, J. S. DeTar and C. E. Umphrey, we are extending, through a student aid revolving fund, supplementary financial help to six upperclass medical students who agree to practice after internship in a rural community at least three years, in recognition of the aid. Each aid is a loan and the aggregate to date is $10,150.00. Four recipients are in the University of Michigan and two are in Wayne University.

We support two lectures for which we provide $100.00 honorariums and expenses for each. One is the Biddle Lecture at the State Society annual meeting in the fall and the other is our own Foundation Lecture at the Michigan Clinical Institute in the spring. Other activities exist and several sponsorships do not entail costs. The waning financial support of the Michigan Health Council is a reasonable further obligation of the Foundation.

Services are asked and are required frequently. Advice and counsel to the high school student concerning premedical requirements, to the premedic concerning medical school admission, to those who have not secured admission to medical school, take time and represent a contribution from the Foundation. The MD Placement program assumed by the Michigan Health Council has relieved the Foundation of this service.

Your President and Secretary have consulted with several professional fund raisers who forecast success. We are aware, however, that fund raising under any plan is a hard job and even with professional counselors. We are advised also that organization of doctors in each district is required to solicit doctors to give. Gifts from outsiders or from non-medical sources come as supplemental and depend upon original doctor support. Our Foundation has a broad scope but fundamentally it is the doctors' concept.

This Board of Trustees will desire specific sanction of The Council of the Michigan State Medical Society before negotiating a state-wide appeal for funds through a formal and professionally conducted solicitation. Such an effort would be an all-out, energetic campaign with a full quota of workers in each councilor district and probably in most counties to secure generous, universal giving by the profession. Besides solicitation of immediate contributions I would suggest again, as I have previously done, additional pledges for annual contributions. A possible and practical method of collection of the latter might be with annual State Society dues. Any method to secure annual contributions to the Foundation is acceptable, so important is the need for funds.

These last remarks do not represent a recommendation from the Board of Trustees although, a year ago, a resolution prevailed to canvass ways and means for fund raising beyond methods previously used and to canvass possibilities under professional guidance or supervision. The foregoing is in response to the motion.

Your President feels certain that use of professional fund raising experts will depend upon the energy and organizational creation of each Michigan State Medical Society Councilor who, with all members of the MSMS Council, the trustees and elected individuals compose the membership or stockholders of this Corporation. Without diligent Councilor leadership in each District, full success of a campaign statewide would not be obtained, even under professional auspices. Without such support how can we utilize or even obtain the experts?

The Foundation is a going concern which has been conducted with conservatism and stringent economy. Overhead has thus far been carried by the offices of the officers. Possibilities for growth reach skyward. Your Trustees are prepared to carry on and function to the limit of funds assembled.—*January 28, 1954.*

Annual Report of the Secretary

By Wm. J. Burns, Lansing

The Secretary has executed the duties of his office according to the By-Laws and as provided in Robert's Rules of Order pursuant to the instructions of the members of the Board of Trustees, with the continued advice and guidance of President Carr and Treasurer Gardner to whom the Secretary again expresses gratitude and appreciation.

The Woman's Auxiliary to the Michigan State Medical Society was reminded on January 12, 1954, that interest on the $1,000 U. S. Government Bond (which the Woman's Auxiliary contributed to the Foundation in 1951) is due and payable.

Letters have been written to those who, several years ago, pledged amounts to the Foundation, seeking payment or a commitment. The following contributions were received in January, 1954: Drs. C. W. and Bertha W. Ellis, Hollywood, Florida, paid the $90.00 balance on their pledge; H. L. Weitz, M.D., Traverse City, paid the $50.00 balance on his pledge. In July, 1953, E. I. Carr, M.D., contributed $1,000 to the Foundation in payment of his second pledge of like amount; Dr. Carr's current contribution was earmarked to the Student Loan Fund.

The Michigan Foundation for Medical and Health Education Lecture, to be given on the occasion of the 1954 Michigan Clinical Institute (with the speaker's expenses to be paid out of the Biddle Fund of the Foundation) will be presented on March 11, 1954, by Albert B. Sabin, M.D., of Cincinnati, who will speak on: "Vaccination for Poliomyelitis."

The Biddle Lecture, given on the occasion of the 1953 Michigan State Medical Society Annual Session (with the speaker's expenses paid out of the Biddle Fund of the Foundation), was presented in Grand Rapids on September 23, by U. S. Senator Homer Ferguson whose subject was "World Affairs and Foreign Policy."

The Student Loan Fund has been utilized to aid the medical education of six medical students, four from the University of Michigan and two from Wayne University.

Pursuant to instructions of the Board of Trustees, the Secretary contacted Kalamazoo College in regard to its recent successful drive for $75,000. Its procedure is reported as follows:

"Our procedure through the years has been to organize locally on a conventional community chest campaign basis. It is our experience that a campaign will be about as good as the organization set up. The basic principle is that the people must be called upon personally and called upon by their peers. The heaviest givers are included in an advance gifts division, and this division is broken down into units. The paper mills are solicited by two paper mill presidents, heavy manufacturers are solicited by a committee of top officers in heavy manufacturing, the banks by a bank vice president, and the automobile dealers by a committee of their group, top men. Private individuals are solicited by a committee of highly respected individuals. Then there is the general division of smaller givers with some 1600 cards to be worked. This division was manned and organized this year by the officers of the alumni association, and is the most difficult division to make work as it should. Actually this division brings in just a few thousand dollars, but the big givers will not give unless they feel that everybody is giving.

"The drive is launched with opening meetings, either en masse or in groups. We shall have a total of about 200 workers if we are able to become fully organized. As the years have gone by and our drive has become recognized, much as is a church budget drive, we have found the mass meetings less and less important. Then of course we have report meetings every few days because solicitors will work only the last day or two before report meetings.

"We have also conducted a mail campaign out over the country, and that is done by means of a brochure and letters; letters from the general chairman of the drive, letters from the various alumni class agents, and letters from the office itself. The literature is used locally, too.

"It will take one person and a small office weeks of work, full time, to get the organization set up, and again I point out that the organization is the heart of the campaign. During the drive itself, which should not last too long, constant letters must go out to the workers, and personal contact with the workers should be made. The office will find it necessary to make the approach direct to foreign corporations. Actually, they do not produce much on annual drives.

"It will usually work out that when you first approach the people for leadership in a drive, everyone will say "no." You then get the group together and say, "We have gone the rounds, now which one of you is going to do it?" It is then that your organization begins to take shape. I say all of this to point out that there are no short cuts. Every individual who says "no" to becoming a part of the organization becomes a better potential giver. The job takes time, nerve, patience, everlasting work, and incredible, stupid faith."

—January 28, 1954

An interesting article entitled "Must We Follow the VA Route to Socialized Medicine" by Holman Harvey, a staff writer, appears in the March issue of *Reader's Digest*. The opening paragraph states: "The American people had better decide soon whether or not they want free government medical care. For it is descending upon them with bewildering speed."

Michigan State Medical Society Past Presidents 1940-1947



The 1940's first brought undeclared war, then World War II with all its hurly-burly, heartbreak and violence. By 1947, Michigan—"Arsenal of Democracy"—was at the peak of its postwar readjustment. Too much cannot be written about the wartime service of Michigan's doctors of medicine; about those in uniform who staffed stateside general hospitals, fought disease in crowded training camps, or cared for the fighting forces in battle areas throughout the world. More could be written about those who—not necessarily by choice—served in their home communities, watching over the health of greater numbers than ever before. During these eight years of emergency, great medical advances and the age of the atom were born. With their birth came a prayer that they could be put to their greatest use in a time of lasting peace.

(The final page in this series on MSMS past presidents will be featured in an early issue.)

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PROPHYLAXIS FOR EYES OF NEWBORN

At a meeting of the State Council of Health, the State Health Commissioner called to the attention of the members the penal code which requires that the State Health Commissioner shall officially name and approve a prophylaxis to be used in treating the eyes of newborn infants. He recommended that the presently named prophylaxis (1% silver nitrate solution) be continued, but that the door be opened for the use of other prophylactics under controlled research conditions.

Specifically the Commissioner recommended that the designation be changed to read as follows:

"In accordance with Act 328, P.A. 1931, silver nitrate, 1.0 per cent, in solution, is named and approved as a prophylactic required to be used in every child's eyes immediately after birth. The use of other prophylactics under controlled research conditions may be permitted when such research studies have been previously approved by the state health commissioner."

The Council accepted the recommendation. Any physician wishing to carry on a controlled research project on the use of a prophylactic other than silver nitrate in the eyes of the newborn is invited to get in touch with the State Health Commissioner.

HEALTH OFFICERS APPOINTED

W. B. Prothro, M.D., Director of the Grand Rapids City Health Department, became director of the Kent County Health Department also on February 1. He succeeded J. D. Brook, M.D., who retired after twenty-three years as health officer of the county.

Howard Cadwell, M.D., has been appointed director of the Wayne County Health Department, effective March 1. Doctor Cadwell was with the Arlington County Health Department, Arlington, Virginia, prior to coming to Michigan.

POLIO VACCINE TEST

The newly developed polio vaccine will be tested in eleven Michigan counties: Bay, Calhoun, Lenawee, Monroe, Muskegon, Oakland, Ottawa, St. Clair, Washtenaw, Ingham and Macomb.

The vaccine will be given children in the first three grades of private, public and parochial schools.

Only children whose parents have signed a form requesting that they participate in the test will be given the vaccine.

The vaccine has been allocated to Michigan by the National Foundation for Infantile Paralysis.

Each lot of the vaccine will be independently tested for safety by the National Institutes for Health of the United States Public Health Service, the manufacturer and by the laboratory of Dr. Jonas E. Salk, of the University of Pittsburgh, who developed the vaccine.

In addition to these safety tests, each lot of the vaccine will have been shown to cause the development of protective antibodies in human volunteers.

Half of the children participating in the test will get three doses of the trial vaccine. The other half will receive an ineffective solution. All doses will be administered in the arm.

No one, not even the doctors giving the vaccine or state or local officials, will know which child receives the vaccine and which receives the ineffective substance.

The information will be recorded by coded identifications.

SECOND MULTIPLE SCREENING PILOT STUDY

Michigan's second pilot study in health screening for adults, industry-based, was carried on at the Mac Sim Bar Company, paper manufacturers, in Otsego, February 15 to 19. Co-operating in the project were the Mac Sim Bar Company, labor unions, the Allegan County Medical Society, the Allegan County Health Department and the Michigan Department of Health.

Extension of the screening service to family members eighteen years of age and over was a new element in the Otsego program. Only employes were included in the first pilot study, in Munising, early in October. Participation on the part of employes was entirely voluntary and screening was done on company time.

Screening procedures included checking height and weight, blood pressure, hemoglobin, blood specimens for syphilis and diabetes, chest x-ray for tuberculosis, heart abnormalities and cancer of the lungs, and urine specimens for albumin, sugar and microscopic tests for indications of heart conditions.

Reports were confidential, furnished only to the physician named by the person examined and to the health department. A person with significant findings was notified that the results of his tests had been reported to his physician. He was urged to get in touch with his physician. The local health department plans to help in the follow-up on these persons, to make sure that they see their doctor and that they return to him for any needed treatment. The person with negative findings was notified that his screenings indicated no abnormal conditions but that it was by no means a thorough examination and it gave no final proof that everything was as it should be.

Response of workers in the Otsego study was 74 per cent in comparison with the more than 90 per cent in the Munising study.

These pilot studies are expected to furnish much needed information on ways of promoting adult health and chronic disease control. They should indicate how successful such screening programs can be in finding beginning chronic disease in apparently well, working-age

(Continued on Page 444)



Through its probable action on the labyrinth, dependable control of vertigo and nausea has made Dramamine the most widely-prescribed product in its field.

Vertigo: The Labyrinthine Structure and Dramamine®

Dramamine's remarkable therapeutic efficiency is believed to be the result of suppression of the over-stimulated labyrinth. Thus it prevents the resulting symptom complex of vertigo, nausea and, finally, vomiting.

First known for its value in motion sickness, Dramamine is widely prescribed for nausea and vomiting of pregnancy, electroshock therapy, certain drugs and narcotization. It relieves vertigo of Ménière's syndrome, fenestration procedures, labyrinthitis, hypertensive disease and that accompanying radiation and antibiotic therapy.

A most impressive number of clinical studies shows that Dramamine has a high therapeutic index and minimal side actions. Drowsiness is possible in some patients but in many instances this side action is not undesirable.

Dramamine (brand of dimenhydrinate) is available in tablets of 50 mg. each; liquid containing 12.5 mg. per 4 cc. Dramamine is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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Communication

To: Mr. William J. Burns, Executive Secretary
Michigan State Medical Society and
The Secretaries of all component County Medical Societies of the Michigan State Medical Society and A.M.A.

Subject: Applications for Membership in a Medical Society

Temporary licentiates of the Michigan State Board of Registration in Medicine may submit the number or numbers of their temporary licenses upon membership application forms, but may not submit the statement that they are registered in the office of the county clerk. This office does not issue certified copies of temporary licenses to be filed in the office of the county clerk for the reason that it would imply that the temporary licentiate had the privilege of practicing medicine within the confines of the county which would contradict the intent of the amended statute which confines the privilege of the practice of medicine within the walls of the approved training hospital to which the temporary licentiate is assigned.

Respectfully,
MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE
By: J. EARL MCINTYRE, M.D.
Executive Secretary

Lansing, Michigan
February 18, 1954

Dear Doctor Haughey:

In reply to your letter inquiring about the facilities for medical schools, I am glad to give you the following information.

The greatest number of applicants to medical schools per year was in 1949, when approximately 24,000 applied to United States Schools. The number of applicants has declined each year ever since to a figure of 16,763 for the year of 1952. Of those 16,763, 7,425 were admitted. This is a ratio of 2.68 compared to the ratio of 3.47 for 1949. The number of applicants for 1953 has decreased again to approximately 14,000, and the number admitted was approximately 7,400.

The Michigan State Medical Society has on a number of occasions passed resolutions to ask the two medical schools in the State to increase enrollment, and has at the same time asked the Legislature to make such increases financially possible. The Council on Medical Education of the American Medical Association is offering professional advice without cost to any reputable organization that is contemplating or in the process of establishing a new medical school. This council is interested only in the quality of training offered to future doctors.

To the new medical schools enumerated on Page 132 of the September 12 issue of the Journal of the American Medical Association, we can now add that the University of Florida has the initial appropriation and the committment to proceed to form another school in that State. Several schools are enlarging enrollment. The University of Michigan is the largest at present with 200 students. The University of Tennessee will soon have a number equal to ours. Other schools which will take 200 students per year when their building programs are completed are the Ohio State University, Indiana University, and the State University of New York in New York City —formerly Long Island Medical School. The only limit placed upon medical school enrollments are facility—physical and personal. There is still a shortage of

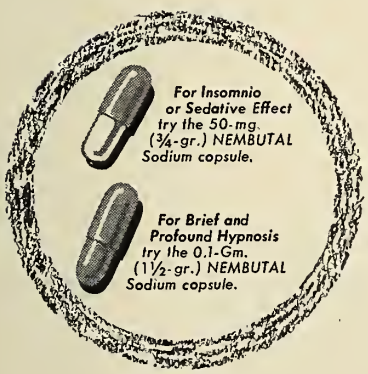
(Continued on Page 444)



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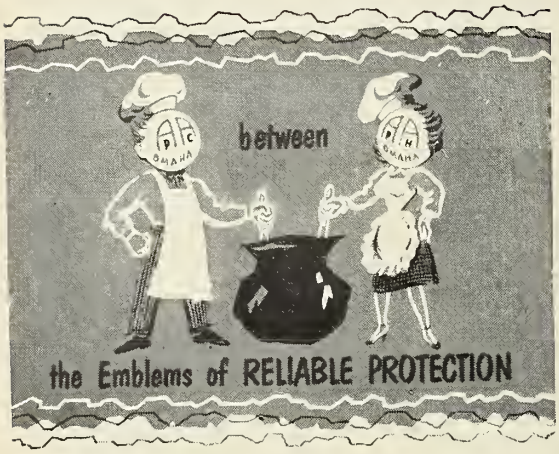
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3. *There's less drug to be inactivated, shorter duration of effect, wide margin of safety and little tendency toward morning-after hangover.*
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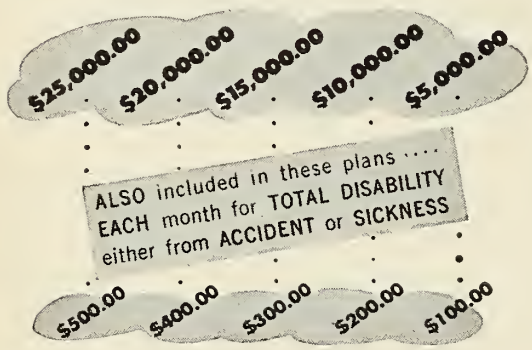
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(Continued from Page 442)

academic personnel throughout the country, particularly in the pre-clinical fields.

A special appropriation of the legislature has permitted an increase in facilities of our institution, chiefly the Outpatient Clinic and Maternity Hospital. The newly opened Veteran's Administration Hospital will aid also and a changed program of the senior year permits more efficient use of the clinical material available. We anticipate an enlarged Children's Hospital, not only for mental disease but for general care. Planning is proceeding on a Medical Science Building.

Our Freshman class size in the 1930's was around 120-130. In the late 1940's it was about 150. The sudden increase to 200 was a greater increase than made by any other medical school in the country. We are proud that we have met public demand and evident need for doctors in this manner.

Sincerely yours,
WAYNE L. WHITAKER, Ph.D.,
Assistant Dean, U. of M. Med. School
University of Michigan Medical School

Ann Arbor, Michigan
February 23, 1951

MICHIGAN'S DEPARTMENT OF HEALTH

(Continued from Page 440)

men and women. They will add to the data on the prevalence of early chronic disease. They will help to determine the costs of such screening and to decide whether results justify expenditures. They will indicate what screening levels are practical, so that more than 50 per cent of those referred to physicians will be confirmed as abnormal.

One additional objective in the Otsego study will be to learn the attitude of the consumer toward the screening program. Home visits are planned to find out what those who took the tests thought of them. Visits will also be made on those who did not avail themselves of the screening opportunity, to learn their reasons.

A paramount purpose of the studies is to work out a mutually satisfactory and productive pattern of community co-operation between health departments, practicing physicians, labor and management in the promotion of adult health.

WHAT THEY THOUGHT of the January 31 Secretaries Conference:

"I thought that the show (nine skits) that was put on at the MSMS County Secretaries Conference of January 31 was excellent. I believe they more clearly demonstrate many of the difficult problems with which the Society must deal."

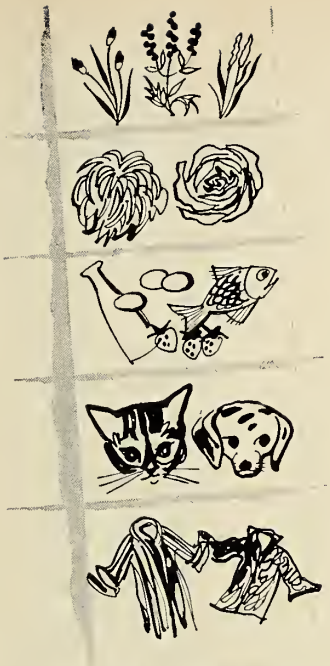
A complete history will often be the best means of arriving at a correct diagnosis of a pelvic tumor.

• • •

The extremely rare arrhenoblastoma is accompanied by amenorrhea but is associated with weight loss, hirsuitism, enlargement of the clitoris, deepening of the voice, and other masculinizing changes.

• • •

One should be hesitant to attribute irregular uterine bleeding to an ovarian cyst.



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NEWS MEDICAL

MICHIGAN AUTHORS

Sylvester E. Gould, M.D., Eloise, Henry J. Gomberg, Ph.D., and Frank H. Bethell, M.D., Ann Arbor, are the authors of an article entitled "Control of Trichinosis by Gamma Irradiation of Pork," published in *The Journal of the American Medical Association,* February 20, 1954.

R. W. Emerick, M.D., L. E. Holly, M.D., A. H. Joistad, Jr., M.D., and K. E. Corrigan, Ph.D., Muskegon, are the authors of an article entitled "Diagnostic Use of Radioisotopes in a General Hospital," published in *The Journal of the American Medical Association,* Februray 6, 1954.

Traian Leucutia, M.D., Detroit, is the author of an article entitled "Chemotherapy Use in Combination With Irradiation for the Treatment of Cancer," published in the *Wisconsin Medical Journal,* February, 1954.

S. W. Hoobler, M.D., Ann Arbor, is the author of an article entitled "The Modern Treatment of Hypertension," published in the *University of Michigan Medical Bulletin,* January, 1954.

Lieutenant John R. Christensen and Lieutenant Leroy P. Houck, Medical Corps, United States Army, from the Percy Jones General Hospital, United States Army, Battle Creek, Michigan, are the authors of an article entitled "Mucocele of the Maxillary Sinus," published in *A.M.A. Archives of Otolaryngology,* February, 1954.

D. Emerick Szilagyi, M.D., and John A. Hemmer, M.D., Detroit, are the authors of an article entitled "Resection of Aortic Bifurcation and Replacement With Homologous Graft for Aneurysm," published in *The Journal of the American Medical Association,* February 27, 1954.

Frederick A. Coller, M.D., and Elmer B. Miller, M.D., Ann Arbor, are the authors of an article entitled "Acute Cholecystitis" published in *The American Academy of General Practice,* February, 1954.

Joseph A. Witter, M.D., and Max First, M.D., Detroit, are authors of an article entitled "Ligation of the Hepatic and Splenic Arteries for Advanced Periportal Cirrhosis" published in the *Alexander Blain Hospital Bulletin,* November, 1953, reprinted from *Surgery,* May, 1953.

Alexander Blain, III, M.D., Nester A. Flores, M.D., and Francis Gerbasi, M.D., Detroit, are authors of an article entitled "Present Status of Peripheral Neurectomy for Pain in Obliterative Arterial Disease," presented at the Sixth Annual Meeting of the American Society for the Study of Arteriosclerosis, Chicago, Illinois, November 9-10, 1952, and published in the *Alexander Blain Hospital Bulletin,* November, 1953.

Alexander Blain, III, M.D., Detroit, is the author of an article entitled "Scalenus Anticus Syndrome Precipitated by an Attack of Pleurisy," published in the *Alexander Blain Hospital Bulletin,* November, 1953, reprinted from *Surgery,* December, 1952.

John F. MacGregor, M.D., Owosso, and Frederick Goethe Smith, M.D., Marion, Ohio, are authors of an article entitled "The Value and Limitations of Endarterectomy in Chronic Arterial Occlusion," published in the *Ohio State Medical Journal,* February, 1954.

C. Paul Hodgkinson, M.D., R. R. Margulis, M.D., and J. H. Luzadre, M.D., Detroit, are the authors of an article entitled "Etiology and Management of Hypofibrinogenemia of Pregnancy" published in *The Journal of the American Medical Association,* February 13, 1954.

The West Virginia Medical Journal for February, 1954, quotes two paragraphs from the article entitled "Role of Obesity in Diabetes" by William H. Olmstead, M.D., which appeared in THE JOURNAL of the Michigan State Medical Society.

Leo H. Bartemeier, M.D., Detroit, is the author of an article entitled "Progress of Psychiatry and the Utilization of Its Principles in the Daily Practice of Medicine" published in *World Medical Journal,* January, 1954. The paper was before The First Western Hemisphere Conference of The World Medical Association, at Richmond, Virginia, April 24, 1953.

Carey P. McCord, M.D., Ann Arbor, is the author of the fifth of a series of articles entitled "Lead and Lead Poisoning in Early America" published in *Industrial Medicine and Surgery,* February, 1954.

Donald Marshall, M.D., Kalamazoo, is the author of an article entitled "Glioma of the Optic Nerve" as a manifestation of von Reckenghauser's Disease, published in *American Journal of Ophthalmology,* January, 1954.

Harold F. Falls, M.D., Ann Arbor, is the author of an article "Clinical Detection of the Genetic Carrier State in Ophthalmic Pathology" published in *Transactions of the American Academy of Ophthalmology and Otolaryngology,* November-December, 1953.

Reed O. Dingman, M.D., Ann Arbor, by invitation, is the author of an article entitled "Repair of the Deformity" published in *Transactions of the American Academy of Ophthalmology and Otolaryngology,* November-December, 1953.

Parker Heath, M.D., Boston, formerly of Detroit, is the author of a paper entitled "Essential Atrophy of the Iris" published in *The American Journal of Ophthalmology,* February, 1954,; also a "Clinical Pathological Conference."

Russell F. Weyher, M.D., Detroit, is the author of an article entitled "Myxedema Heart—Advanced Failure

(Continued on Page 448)

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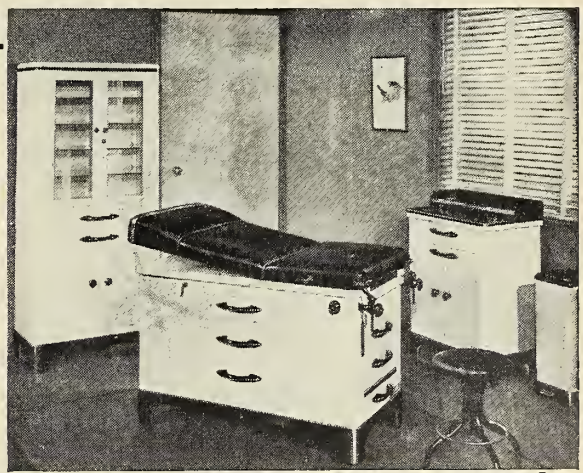
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(Continued from Page 446)

with Rapid Recovery" which appeared in JAMA, October 17, 1953.

S. E. Gould, M.D., Eloise, and **F. H. Bethell, M.D.**, Ann Arbor, assisted by **H. J. Gomberg, Ph.D.**, Ann Arbor, are authors of an original article on "Control of Trichinosis by Gamma Irradiation of Pork" which appeared in JAMA of February 20.

F. D. Dodrill, M.D., Detroit, is the author of an original article entitled "Experience With the Mechanical Heart" which appeared in JAMA of January 23, 1954.

J. F. Holt, M.D., H. B. Latourette, M.D., and **E. H. Watson, M.D.**, Ann Arbor, are the authors of an original article "Physiological Bowing of the Legs in Young Children" which appeared in JAMA of January 30, 1954.

Northwestern University has instituted a six-week summer course for 1954, to cover study of instruments and methods of testing hearing in order to train office assistants.

The Harvard School of Public Health will give postgraduate scholarships in amounts ranging up to $5,000 to qualified candidates desiring to study at the School during the academic year 1954-55. For further information write to David S. Davies, Harvard School of Public Health.

* * *

The AMA awarded two citations for distinguished service in the field of industrial health during the 14th annual Congress on Industrial Health held in Louisville recently.

The recipients were: Dr. Anthony J. Lanza, New York, director of the Institute of Industrial Medicine, New York University — Bellevue Medical Center, and Dr. Clarence D. Selby, Port Huron, Michigan, former medical consultant to the General Motors Corporation.

The two citations were presented by Secretary Lull, the first ever awarded by the AMA in the industrial health field, at the opening session of the Louisville meeting.

The two doctors for years have been leaders in the movement for better health conditions among workers in this country.

* * *

Correction.—In the January issue of THE JOURNAL, was published a picture supposedly of the author, illustrating an article by Dr. Simon S. Farbman. By mistake, the picture published was that of his brother, Dr. Aaron A. Farbman.

* * *

Dr. A. C. Furstenberg, Dean of the Medical School, University of Michigan, Ann Arbor, left during February for a three weeks' trip in South America where he had been invited to speak to professional groups at Caracas, Venezuela, Rio de Janiero, Lima, Peru, and in Panama.

* * *

Sam W. Donaldson, M.D., and Children's Pets.—The American College of Radiology has released an interesting story of how Dr. Sam Donaldson looks after the neighborhood pets, cats, dogs, horses, or whatever.

(Continued on Page 450)

"A program of treatment
for *chronic ulcerative colitis...*

as described by Lester M. Morrison, M.D., Los Angeles[1]

... is based on the use of 1) azopyrine*, 2) ACTH or cortisone and 3) psychotherapy."

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1. Rev. Gastroenterology 20:744 (Oct.) 1953; abstract in J. A. M. A., 153:1580 (Dec. 26) 1953.

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(Continued from Page 448)

Dr. Donaldson's animal practice began years ago. Usually it was a youngster who would bring his pet into his department for some attention. At is happened, Dr. Donaldson relates, the children were the offspring of medical colleagues in Ann Arbor.

Although his animal practice began with the small-fry of his medical confreres, this is no longer the case. The whole community of Ann Arbor, and the surrounding areas, seem alert to Dr. Donaldson's way with their critters.

Between eighty to 100 animals a year are examined by Dr. Donaldson and his staff at St. Joseph's Mercy Hospital in Ann Arbor—mostly bone and joint cases.

Many patients in the waiting rooms have even indicated a willingness to postpone their own examinations in order for Dr. Donaldson to x-ray a pet who has been brought to his office in the arms of a tearful child.

Says Dr. Donaldson: "I don't know how it would work out in large, metropolitan area, but in a town such as Ann Arbor, our experience has shown that it is good public relations."

* * *

An American-Canadian Advisory Committee on Industrial Health to the World Medical Association was appointed in February.

Committee members, who were appointed during the AMA Industrial Health Congress in Louisville, are: Drs. Henry H. Kessler, Newark; George Saunders, New York; Max R. Burnell, Detroit; Carey P. McCord, Ann Arbor, Michigan; John Poutas, Cambridge, Massachusetts; Robert A. Kehoe, Cincinnati, and Grant Cunningham, Toronto.

The World Medical Association, representing 700,000 physicians in forty-six national medical societies, plans to establish an International Committee on Industrial Health for the benefit of industrial workers everywhere.

Dr. Louis H. Bauer, secretary-general of the World Medical Association, reported that there is a strong possibility that the WMA and the AMA Council on Industrial Health will sponsor an International Conference on Occupational Health in 1957. The site remains to be selected. The movement has the support of industrial health leaders representing medicine, industry and government.

* * *

Combined Medical Meetings.—Since 1950, the New Hampshire Medical Society and the Vermont State Medical Society have been holding combined annual meetings, and the plan is working very well. The meeting places have alternated between the two states, but this year and the two succeeding years—1955 and 1956—the combined meetings are scheduled to be held at the Mt. Washington Hotel, Bretton Woods, New Hampshire.

Recently the Medical Society of Virginia and the Medical Society of the District of Columbia decided to hold combined annual meetings at the Shoreham hotel in Washington.—*AMA Secretary's Letter,* March 3, 1954.

(Continued on Page 452)

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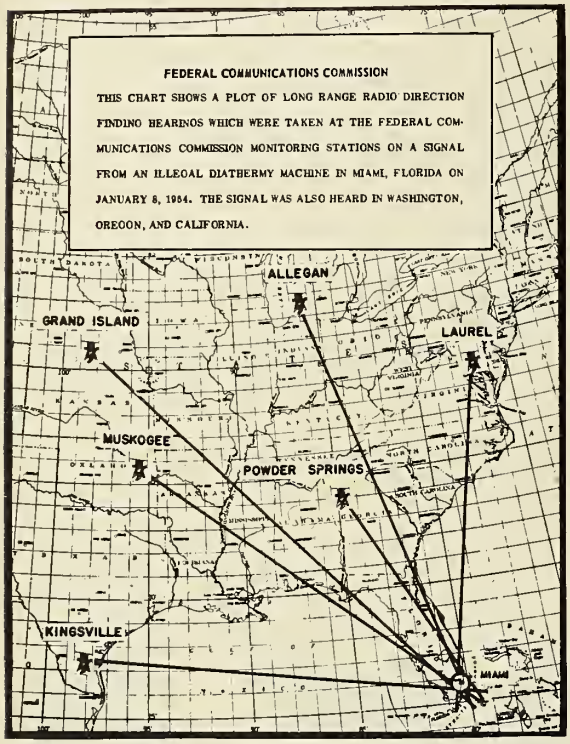
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(Continued from Page 450)

Illegal Diathermy Machines and Civil Defense.—On February 19, 1954 the Federal Communications Commission issued a four-page closely-typed communication, with a chart, calling attention to the use of thousands



of illegal diathermy machines, which do not now meet standards, and are broadcasting interfering short waves which can and do interfere with safety and military radio communications.

The last sentence of the "Public Notice" reads as follows:

"The users of illegal equipment are warned that the Commission has available to it, and intends to follow, the following enforcement procedures wherever appropriate: (1) The issuance of cease and desist orders, enforceable in the courts, directed to the users of the illegal equipment; (2) Application to the courts for injunctions against the use of illegal equipment; (3) The institution, in aggravated cases, of criminal proceedings against the operators of illegal equipment."

These machines could wreck planes, foul up instrument landing signals; block a radar screen used by airports to prevent mid-air collisions; throw a radar guided missile off course; interfere with police radio calls; or become a radio beam to guide an enemy bomber to its target.

* * *

At the Annual Sectional Conference of the American College of Surgeons, held March 30, through April 2, 1954, at Sheraton-Mount Royal Hotel, Montreal, Quebec, several Michigan physicians were active in various capacities. Those holding offices were: Reed M. Nesbit, M.D., Ann Arbor, and Grover C. Penberthy, M.D., Detroit, Board of Regents; Frederick A. Coller, M.D., Ann Arbor, member of the Advisory Council; Russel L. Mustard, M.D., Battle Creek, Governor. On the program were Russel L. Mustard, M.D., who took part in a panel discussion on "Jaundice"; Charles S. Stevenson, Jr., M.D., in a symposium on Cancer, "The Place of Surgery in the Treatment of Uterine Cancer;" and Charles G. Johnston, M.D., Detroit, who presented motion pictures of "Obstruction of the Small Intestine."

* * *

The Wayne University Medical Library Fund is energetically continuing its fund-raising campaign and expects to meet a goal of $200,000 before May 10, 1954.

As of March 12, more than $143,000 has been received in pledges, the Campaign Committee reports. Most of the pledges have come from Wayne University College of Medicine Alumni.

A modern medical library, such as the one proposed, is an efficient and economical means for a doctor to keep abreast of current medical literature. With this thought in mind, the Wayne University Medical Alumni Association launched its campaign. The proposed new Medical Library, to be located in the heart of the Detroit Medical Center, will provide doctors in Michigan with modern, functional facilities in which to study and do research.

When the library is completed, there will be several private reading rooms and study areas. Conference type rooms and a large parking area are planned. The

(Continued on Page 454)



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(Continued from Page 452)

emphasis has been put on a functional and efficient arrangement providing privacy and comfort for those who wish to study.

Construction on the building can be started as soon as there is $200,000 available in cash. The committee feels sure this goal will be reached by the May 10, 1954 deadline.

Doctors desiring to make a contribution or pledge to the Library Fund should make checks payable to The Wayne University Medical Library Fund, Inc., 5165 Second Avenue, Detroit 1, Michigan.

Wayne University will then be able to serve doctors in Michigan with modern medical library facilities conducive to research and study.

* * *

Medical alumni of Wayne University will convene at the Hotel Fort Shelby, Wednesday, May 12, 1954, for their 68th Annual Clinic Day and Reunion.

Twelve members of the Class of 1904 will be awarded Golden Anniversary Certificates and life memberships in the Wayne University Medical Alumni Association.

Registration for the Annual Clinic Day program will start at 9:00 a.m. and professional meetings will be conducted during the morning and afternoon. At the luncheon, to be held in the cafeteria of the Wayne University Medical Science Building, Dean Gordon Scott will report to the alumni.

Speakers for the session include: William J. Dieckmann, M.D., Professor of Obsetetrics and Gynecology, University of Chicago; Egbert H. Fell, M.D., Clinical Associate Professor of Surgery, University of Illinois; George H. Gardner, M.D., Chairman of Department of Obstetrics and Gynecology, Northwestern University; Carl A. Moyer, M.D., Professor of Surgery, Washington University, St. Louis, Missouri; Edith L. Potter, M.D., Associate Professor of Pathology, University of Chicago; Arthur J. Vorwald, M.D., Chairman, Department of Industrial Medicine, Wayne University.

Special class reunions will be held for the classes of 1909, 1914, 1919, 1924, 1929, 1934, 1939, 1944, and 1949.

Genesee County Medical Society and the Beaumont Memorial: "The enclosed check for $120.00 is the Genesee County Medical Society's contribution to the Beaumont Fund for the year 1953. It represents the amount contributed for *new* members accepted into our membership since the date of our last check (April 1952)."

Thanks, Genesee County Medical Society members, for this additional contribution to the Beaumont Memorial. May many of your members be present for the Dedication on Mackinac Island on Saturday, July 17, 1954.

The Tuberculosis Control Committee of the Michigan State Medical Society recommended at its January 14 meeting that a copy of the pamphlet *Is It TB?* be

(Continued on Page 456)



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(Continued from Page 454)

sent to all members of the MSMS, explaining that "this brochure contains excellent information." Acting upon that recommendation, the Michigan Tuberculosis Association, and its affiliates, have agreed to mail this booklet to all members.

Is It TB? was prepared by the Subcommittee for General Practitioners, Committee on Medical Education and American Trudeau Society. John W. Towey, M.D., Pinecrest Sanatorium, Powers, is chairman. Included are considerations of such factors in diagnosis as history, symptoms, physical examination, chest x-ray, tuberculin testing, and search for tubercle bacilli.

Designed to provide the general practictioner with a ready index of essential information needed to diagnosis pulmonary tuberculosis, *Is It TB?* does so with clarity, brevity, and accuracy. The pamphlet deals solely with the diagnosis of pulmonary tuberculosis, no attempt being made to cover other conditions.

* * *

The Michigan Heart Association does not provide funds for medical care, diagnosis, examination or treatment of any kind.

Michigan Heart Association funds are used for research, education and community service projects.

More progess has been made in heart disease control in the last 25 years than in all the centuries that preceded it.

Hope deferred maketh the heart sick.

* * *

H. R. Mayberry, M.D., of Bryan, Ohio, represented the Ohio State Medical Association and J. E. Dudding, M.D., of Hope, Indiana, and James A. Waggener, Executive Secretary, represented the Indiana State Medical Association at the March 10 Conference for Interns, Residents and Senior Medical Students of Michigan. The Conference was held in the Sheraton-Cadillac Hotel, Detroit, during the Michigan Clinical Institute. Speakers on the program were:

"Mechanics of Setting Up a Practice"—Warren R. Mullen, M.D., Pentwater

"Public Relations"—L. Fernald Foster, M.D., Bay City

"Michigan Medical Service and the Doctor"—R. L. Novy, M.D., Detroit

* * *

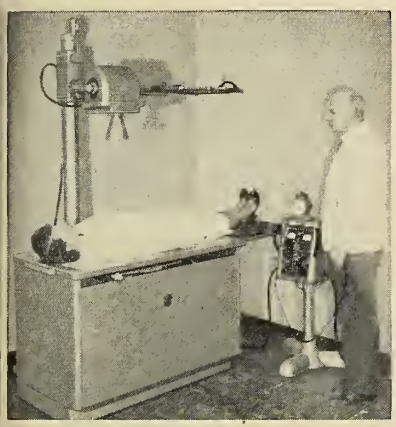
The Genesee County Medical Society recently sponsored a doctor-lawyer-dentist dinner meeting at which Frank G. Dickinson, Ph.D., of the American Medical Association, Bureau of Medical Economic Research, spoke on "Social Security—Is It or Isn't It for Professional People?" The tri-professional meeting was attended by over 200 and was held March 31 at the Durant Hotel.

* * *

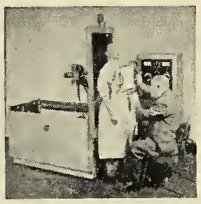
What is the obligation of a county medical society to doctors of medicine who have permitted their membership to lapse for long periods of time?

The Wayne County Medical Society Council recently approved the recommendation of its Ethics Committee that such applicant should be required to pay a per-

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centage of the dues for the years they have not been members, approximately 50 per cent of the local dues. This would be considered an admittance fee or assessment. The ethical consideration is based on Chapter 3, Section 2 of the Principles of Medical Ethics which stipulate:

"For the advancement of his profession, a physician should affiliate with medical societies and contribute of his time, energy, and means so that these societies may represent the ideals of the profession."

* * *

Frank S. Perkin, M.D., Detroit, was named President of the Michigan Epilepsy Center at the January meeting of the Board of Directors.

Congratulations, Doctor Perkin!

* * *

The Medical Library Association will hold its fifty-third Annual Meeting in Washington, D. C., on June 15-18, 1954. Headquarters will be the Hotel Statler. For program write Lt. Col. Frank B. Rogers, Armed Forces Medical Library, 7th St. and Independence Ave., S.W., Washington 25, D. C.

* * *

All European sections of the International College of Surgeons will hold an official meeting in Turin, Italy, June 1 and 2, in the Turin Exposition Building.

* * *

The International College of Surgeons will hold its Ninth Biennial Congress in Sao Paulo, Brazil, April 26 to May 2. Edward J. McCormick, M.D., Toledo, Ohio, President of the American Medical Association and David B. Allman, M.D., Atlantic City, N. J., will represent the American Medical Association in the discussions.

* * *

"Aging—Everybody's Business" is the title of the University of Michigan's Seventh Annual Conference on Aging to be conducted as a workshop in Ann Arbor, June 28-30, 1954. For program write Dr. Wilma Donahue, Chairman, Division of Gerontology, 1510 Rackham Bldg., Ann Arbor.

* * *

The third annual Symposium on Tuberculosis and Other Chronic Pulmonary Diseases for General Practitioners will be held in Saranac Lake, New York, from July 12 through 16. The Symposium is approved by the American Academy of General Practice for twenty-six hours of formal credit for its members. For program write Richard P. Bellaire, M.D., Chest Disease Symposium, P.O. Box 2, Saranac Lake, N. Y.

* * *

The Institute of Industrial Health of the University of Cincinnati announces a Symposium on Fluorides to be presented by the Kettering Laboratory in the Department of Preventive Medicine and Industrial Health on May 10-11-12. The course is open to physicians in industry and public health and to other professional per-

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sons who are interested in the problem of fluorides. For application blank write Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Avenues, Cincinnati 19, Ohio. Attendance will be limited.

* * *

The Committee on Arrangements for the Harper Hospital Reunion held on March 10 in Detroit, was composed of D. P. Osborne, M.D., Chairman, W. L. Anderson, M.D., J. C. Cook, M.D., H. F. Dibble, M.D., L. S. Eno, M.D., H. B. Fenech, M.D., H. U. Mair, M.D., R. C. Moehlig, M.D., and E. A. Osius, M.D.

* * *

Lawrence Reynolds, M.D., Detroit, was honored with a Testimonial Dinner on March 4 upon the occasion of his presentation of The Hickey Memorial Lecture. The Wayne University College of Medicine, Wayne County Medical Society and the Detroit Roentgen Ray and Radium Society were co-sponsors of the Lecture and Dinner.

* * *

The 22nd Annual Convention of the American Society of Medical Technologists will be held at Miami Beach, Florida, June 13-17, 1954. The co-headquarters hotels are the Delano and DiLido.

* * *

Max R. Burnell, M.D., Detroit, and **Carey P. McCord, M.D.,** Ann Arbor, have been appointed members of the American-Canadian Advisory Committee on Industrial Health to the World Medical Association. This seven-man committee will aid the World Medical Association, representing 700,000 physicians in forty-six national medical societies, to establish an International Committee on Industrial Health for the benefit of industrial workers everywhere.

* * *

George Bugbee, Chicago, has been appointed President of the Health Information Foundation, New York. Mr. Bugbee leaves his position as Executive Director of the American Hospital Association.

Congratulations, George Bugbee!

* * *

Official AMA Membership Count. As of January 1, total membership in the American Medical Association stood at 146,723. This figure is broken down as follows:

Active members, including active members excused from the payment of membership dues, 133,841; associate members, 4,534; service members, 8,078, and affiliate members, 270.

* * *

A **testimonial dinner** honoring William J. Stapleton, Jr., M.D., will be held in the Grand Ballroom in the Sheraton-Cadillac Hotel on Tuesday evening, May 11. A reception in the Italian Garden will precede the dinner.

Dr. Stapleton will be honored as Michigan's Foremost Family Physician of the Year and also as a scholar and teacher. As former acting Dean of the Wayne University College of Medicine and now Professor Emeritus, he has annually prepared a review of 100 books for the physician. His reviews are published in the *Detroit Medical News.*

The subscription dinner will be sponsored by the Wayne University College of Medicine Alumni Association, The Wayne County Medical Society, and The Michigan State Medical Society. The committee on

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arrangements includes Don W. McLean, M.D., Chairman; William J. Burns; James E. Cole, M.D.; Duncan A. Cameron, M.D.; Edwin H. Fenton, M.D.; John E. Hauser, M.D.; Leroy W. Hull, M.D.; Ralph A Johnson, M.D.; James E. Lofstrom, M.D.; Lawrence A. Pratt, M.D.; Lawrence Reynolds, M.D.; Dean Gordon Scott; Karl L. Swift, M.D.; Elmer C. Texter, M.D.; and John E. Webster, M.D.

The committee has arranged to dedicate a room in the new medical library in honor of Dr. Stapleton. A portion of the proceeds of the dinner will be used to furnish this memorial room.

Louis J. Hirschman, M.D., will serve as toastmaster for the evening. The Reverend Wendling Hastings of the Fort Street Presbyterian Church, Dr. Stapleton's pastor, will give the Invocation. A personal testimonial will be presented by The Honorable Joseph A. Moynihan, Presiding Circuit Judge of Michigan, a lifelong friend of Dr. Stapleton's.

* * *

C. D. Selby, M.D., Port Huron, former Medical Consultant to General Motors Corporation and Past President of the Ohio State Medical Association, and presently Secretary of the St. Clair County Medical Society, was awarded a citation for distinguished service in the field of industrial health at the 14th Annual Congress on Industrial Health, in Louisville, February 26. This citation was the first ever awarded by the American Medical Association in the industrial health field. Dr. Selby has been a leader in the movement for better health conditions among workers in this country, for years.

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STARTING DATES

SURGERY—Surgical Technic, two weeks, April 19, May 3, May 17
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, June 7
Surgical Anatomy and Clinical Surgery, two weeks, June 21
Surgery of Colon and Rectum, one week, May 10
Thoracic Surgery, one week, June 7
Esophageal Surgery, one week, June 14
General Surgery, two weeks, April 26, July 26
Fractures and Traumatic Surgery, two weeks, June 7
GYNECOLOGY—and OBSTETRICS Gynecology Course, two weeks, June 7
Vaginal Approach to Pelvic Surgery, one week, May 24
Combined Course in Gynecology and Obstetrics, three weeks, April 19
MEDICINE—Two-week Course, May 3
Electrocardiography and Heart Disease, two weeks, July 12
Gastroenterology, two weeks, May 17
Hematology, one week, June 14
DERMATOLOGY—Two-week Course, May 10
PEDIATRICS—Congenital and Rheumatic Heart Disease in Infants and Children, one week, April 19 and April 26
Cerebral Palsy, two weeks, June 14
UROLOGY—Two-week Course April 19
Ten-day Practical Course in Cystoscopy every two weeks

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INTERNATIONAL MEDICAL MEETINGS

Congress of International Society of Surgery, Paris, France, May 21-22, 1954.

International Cancer Congress, Sao Paulo, Brazil, July 23-29, 1954.

International College of Surgeons, Sao Paulo, Brazil, April 26-May 2, 1954.

International Congress of Mental Health, University of Toronton, Toronto, Ontario, Canada, August 14-21, 1954.

International Congress on Obstetrics and Gynecology, Geneva, Switzerland, July 26-31, 1954.

International Congress of Psychology, Montreal, Canada, June 7-12, 1954.

International Congress on Thrombosis and Embolism, Basle, Switzerland, July 15-19, 1954.

International Gerontological Congress, London and Oxford, England, July 12-22, 1954.

Pan-American Congress of Ophthalmology, Sao Paulo, Brazil, June 17-21, 1954.

Pan American Congress of Otorhinolaryngology and Bronchoesophagology, Mexico, D.F., Mexico, February 28-March 4, 1954.

Sectional Meeting, American College of Surgeons, London, England, May 17-19, 1954.

RECENT CONCEPTS IN BREAST CANCER

(Continued from Page 418)

of the internal mammary and supraclavicular nodes to determine operability in selected cases is being practiced by another group. It is too early to draw conclusions from these very worthy clinical studies.

Roentgen therapy and hormone therapy afford palliation and castration may be used in advanced cases and in young women with extensive axillary disease.

Adrenalectomy has afforded palliation in a gratifying percentage of selected cases.

References

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15. Wangensteen, O. H.: Discussion of paper by Taylor and Wallace. Am. Surg., 132:839, 1951.

Pelvic tumors arising in the ovaries most often are not associated with pain, particularly in women over the age of forty.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

SPECIFIC INSTRUCTIONS AND GENERAL INFORMATION FOR MATERNITY PATIENTS. Compiled by Frederick J. Melges, M.D., F.A.C.S. Battle Creek: American Board of Obstetrics and Gynecology, 1953.

Dr. Melges has prepared a painstakingly accurate and complete outline for the use of expectant mothers. It is written for the laity, to be given to the patient for her guidance and instruction. Treatments are not mentioned, but the thousand and one questions normally answered over the telephone are answered in this little book. We consider this book a valuable addition to the doctor's equipment, as well as to the patient's well-being and satisfaction.

* * *

YOU AND YOUR HEALTH. By Edwin P. Jordan, M.D., Executive Director of the American Association of Medical Clinics. New York: G. P. Putnam's Sons, 1954. Price $3.95.

This book is a quite complete treatise on medicine in the home. It describes and outlines the management of many different diseases, giving an up-to-date analysis for the general public. The book is intended as a family text, and is well written by a man used to writing for lay consumption. It will not take the place of the doctor, but will answer many questions.

SPATIAL VECTORCARDIOGRAPHY. By George E. Burch, M.D., F.A.C.P. Henderson Professor of Medicine, Tulane University School of Medicine, Physician-in-Chief, Tulane Unit, Charity Hospital of Louisiana at New Orleans, Consultant in Cardiovascular Diseases, Ochsner Clinic, Visiting Physician, Touro Infirmary, New Orleans. J. A. Abildskov, M.D., Instructor in Medicine, Tulane University School of Medicine, Assistant Visiting Physician, Tulane Unit, Charity Hospital of Louisiana at New Orleans, and James A. Cronvich, M. S., Professor of Electrical Engineering, Tulane University College of Engineering, New Orleans. With 121 illustrations. Philadelphia: Lea & Febiger, 1953. Price, $5.00.

The concept of Vectorcardiography originated in 1920 but has received its greatest impetus in the past several years when the electronic equipment necessary for such studies has become generally available. At the scientific Exhibits of the AMA in 1952, the authors presented an exhibit summarizing their studies at Tulane University since 1945 and this text is the publication of that material.

It is a summary of the principle of vectoradiography and is presented in a simple manner intended primarily for those who are not engaged in research in this field, but who do realize its increasing importance. The brief



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outline format as used in exhibits is continued in the text and a slow and careful perusal is necessary in order to obtain all that is intended.

There are 16 chapters which logically fall into three implied divisions. The first part of the manual covers the principles and methods of recording in spatial vectorcardiography, the middle part describes the authors' own studies and this is followed by individual chapters on the use of this adjunct in specific conditions. This manual contains 121 figures, charts, diagrams and photographs, all of most excellent quality. In a new and complicated field of investigation (this manual presents clearly, concisely) and simply a most excellent introduction for the physician who is anxious to maintain his interests in the latest advancements in Medicine.

G.W.S.

SURGERY OF TRAUMA. Edited by Warner F. Bowers, Colonel, M.C., U.S.A., formerly Chief Surgical Consultant, Office of the Surgeon General. With forewords by Melvin A. Casberg, M.D., Chairman, Armed Forces Medical Policy Council and Surgeons General of the Army, the Navy and the Air Force. 284 illustrations. Philadelphia, London, Montreal: J. B. Lippincott Co., 1953. Price, $15.00.

Surgery of Trauma is a text written largely for the surgeon in military service. Its authors are military and civilian suurgeons of note. However, one soon observes that the text is equally applicable to surgeons in civilian practice who are interested in surgery of trauma.

The book is a very comprehensive story of the surgery of trauma. It is easy to read and presents the current thinking and management of trauma.

The editor has divided it into four sections. The first is devoted to the physiologic aspects of trauma. The second section, making up the large bulk of the book, is devoted to discussion, by chapters, of regional wound, or trauma surgery, involving all areas of the body. The third section is devoted to the military methods of wound management, which have, however, a strong corollary in civilian practice. The last section presents a short dissertation on research problems and methods in trauma.

Again, although written for the military it is an excellent contribution to the problems and management of trauma and should be widely read by every surgeon working in this field.

V.C.A.

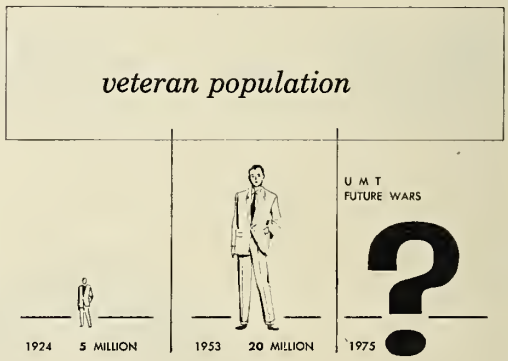
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LOCUM TENENS in southern Michigan in General Practice desired for July-September, 1954. Finishing internship June 30. Please call or write: Henry Krystal, M.D., Wayne County General Hospital, Eloise, Michigan. LO 1-1700.

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In Viewing the VA Medical Program . . .



The U. S. veteran population now includes about 40% of all adult males. Under existing legislation, the federal government is obliged to provide "free" medical care for many of these veterans, if they request it. The medical profession questions the soundness of providing medical care at federal expense to veterans with non-service-connected disabilities. It is likely that by 1975 the U. S. will truly be a "nation of veterans." If the VA medical program continues to accept responsibility for the care of veterans with service-connected and non-service-connected disabilities alike it is difficult to see how a complete federal health program can be avoided.

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*GREENE, B. A.: The Place of Leather Soled Shoes in the Prevention of Anesthesia Explosions, Anesthesiology 13:203-206 (March) 1952.

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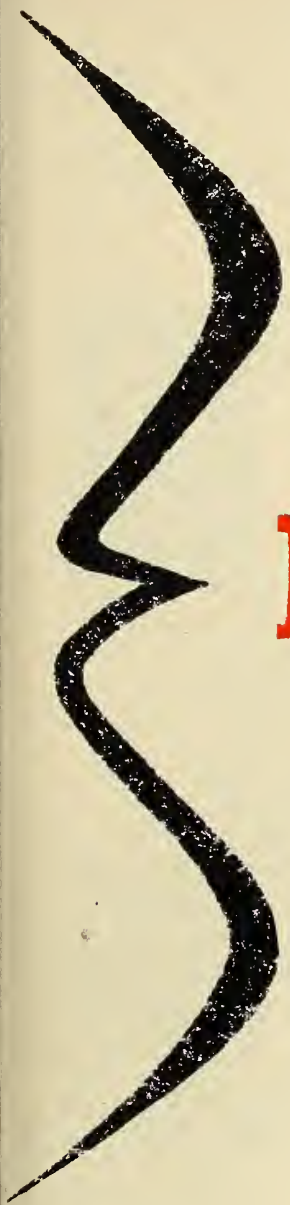
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MSMS

ANNUAL SESSION

Sheraton-Cadillac Hotel

DETROIT

September 29-30-October 1

1954

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For maintenance of blood pressure in such critical instances, and for primary use in less critical situations which do not show the same immediate urgency. Provides 1.0 mg. of Veriloid per cc. in isotonic aqueous solution incorporating one per cent procaine hydrochloride. A single dose lowers the blood pressure significantly, reaching its maximum hypotensive effect in 60 to 90 minutes. By repeated injections (every 3 to 6 hours) blood pressure may be kept depressed for hours or days if necessary.[4] Supplied in boxes of six 2 cc. ampuls. Complete instructions as to dosage and administration accompany every ampul of the parenteral preparations of Veriloid and should be noted carefully.

1. Kauntze, R., and Trounce, J.: Treatment of Arterial Hypertension with Veriloid (Veratrum Viride), Lancet 2:1002 (Dec. 1) 1951.
2. Wilkins, R. W.: Combination of Drugs in the Treatment of Essential Hypertension, Mississippi Doctor *30*:359 (Apr.) 1953.
3. Stearns, N. S. and Ellis, L. B.: Acute Effects of Intravenous Administration of a Preparation of Veratrum Viride in Patients with Severe Forms of Hypertensive Disease, New England J. Med. *246*:397 (Mar. 13) 1952.
4. Moyer, J. H., and Johnson, I.: Intramuscular Veriloid (Aqueous Solution) As a Hypotensive Agent, Am. J. M. Sc. *226*:477 (Nov.) 1953.

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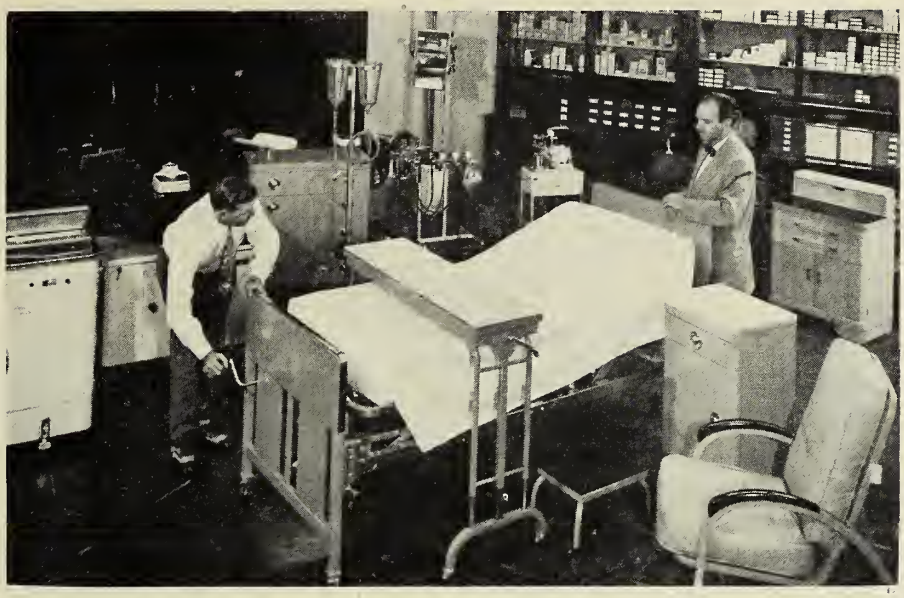
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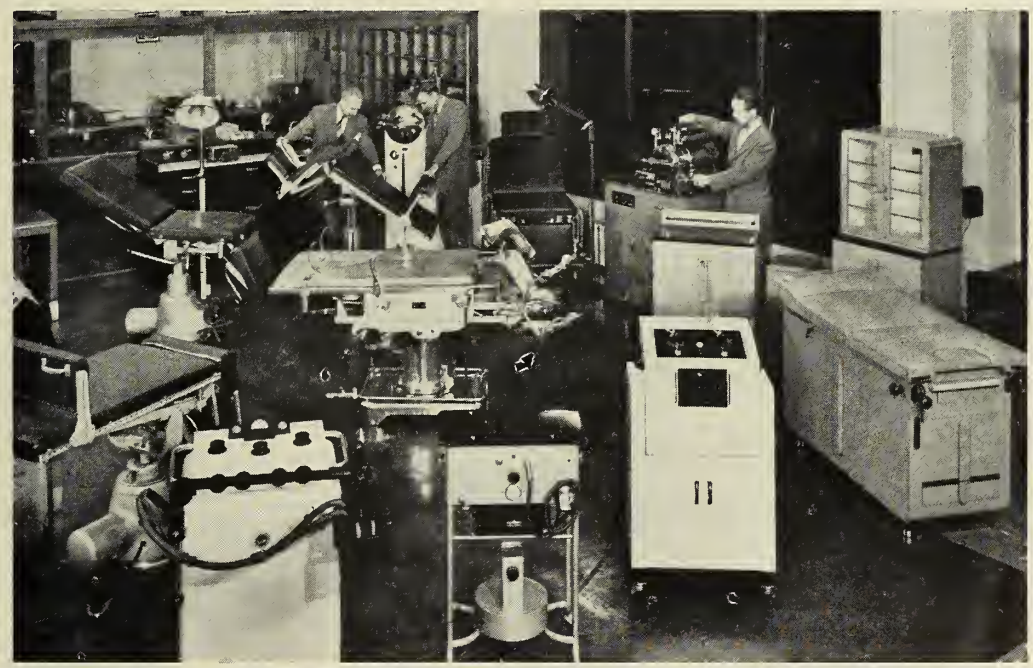
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You and Your Business

DOCTOR HYLAND ON AMA INTERN COMMITTEE



WM. A. HYLAND, M.D.

William A. Hyland, M.D., Grand Rapids, Treasurer and Past President of the Michigan State Medical Society, has been appointed a member of an AMA Committee of five to study the intern problem, pursuant to action of the AMA House of Delegates at its June, 1953, meeting in New York.

The new committee held its first meeting at the AMA headquarters in Chicago on April 24, 1954.

Many of the present problems involving internships stem from the discrepancy between the number of internships offered in approved hospitals and the number of available applicants. As a result, hospitals—particularly those of smaller size and without medical school affiliation—have had difficulty in filling their house staff requirements. It is anticipated that the Committee will give consideration to this and relative problems.

The Michigan State Medical Society offers its full co-operation and aid to the Committee appointed to study the intern problem.

SUE NOT (FOR FEES) LEST YE BE SUED

At Least Wait Until the Statute of Limitations Has Run

A doctor who files an action to collect fees for professional services rendered, before the statute of limitations has run, almost invariably is presented with a countersuit, alleging mistreatment and demanding *affirmative damages.*

The statutory period in Michigan on malpractice actions is two years from the last time the doctor saw the patient professionally. On actions to collect open accounts, the period is six years.

The table shows the statutes of limitations on ordinary malpractice actions, actions for wrongful death, and actions to collect open accounts, in several states. In all listed states except Florida and Texas the statutory period is longer on actions to collect fees than on malpractice or death actions. In Illinois the filing of suit to collect fees reopens the case and makes it possible for the defendant to file a countersuit for malpractice demanding affirmative damages after the statutory period on malpractice actions has expired. In all other states listed a countersuit can be filed after the statutory period on malpractice actions has run, only as a defense to the fee action and not for the collection of affirmative damages.

STATUTES OF LIMITATIONS
(numbers indicate years)

State	Ordinary Malpractice	Wrongful Death	Collection of Account	
California	1	1	4	
Florida	3	2	3	
Illinois	2	1	5	
Indiana	2	2	6	
Iowa	2	2	5	
Kansas	2	2	3	After Jan. 1 Following Services
Kentucky	1	1	5	
Massachusetts	2	2	6	
Michigan	2	3	6	
Minnesota	2	2	6	
Missouri	2	1	5	
Nebraska	2	2	4	
New Jersey	2	2	6	
Ohio	1	2	6	
Pennsylvania	2	1	6	
Texas	2	2	2	
West Virginia	1	2	5	
Wisconsin	2	2	6	

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of March 12, 1954

Sixty-two items were presented to the Executive committee of The Council on March 12. Chief in importance were:

- **Polio Vaccine.**—Otto Vandervelde, M.D., Holland, was present and stated that the members of the Ottawa County Medical Society do not want to be included among those being offered vaccine by the National Foundation for Infantile Paralysis through the Michigan Department of Health. Upon request, the State Health Commissioner discussed the matter and the following motion was adopted by the Executive Committee:

  That the Executive Committee of The Council substantiates the stand presented by Michigan's Health Commissioner A. E. Heustis, M.D.: That no opinion be given (a) until a written statement is obtained from the National Foundation for Infantile Paralysis, from Parke, Davis & Co., the manufacturers, and from the Biologics Control Laboratory of the National Institutes of Health of the United States Public Health Service that every lot of the vaccine and the control substance released for use in Michigan is safe for the use intended; (b) until a written

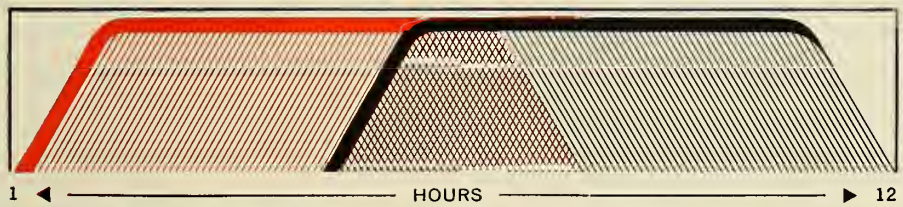
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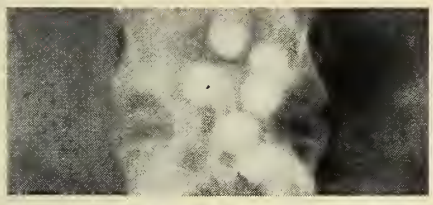
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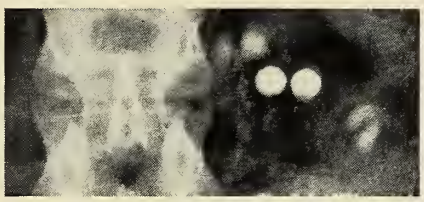


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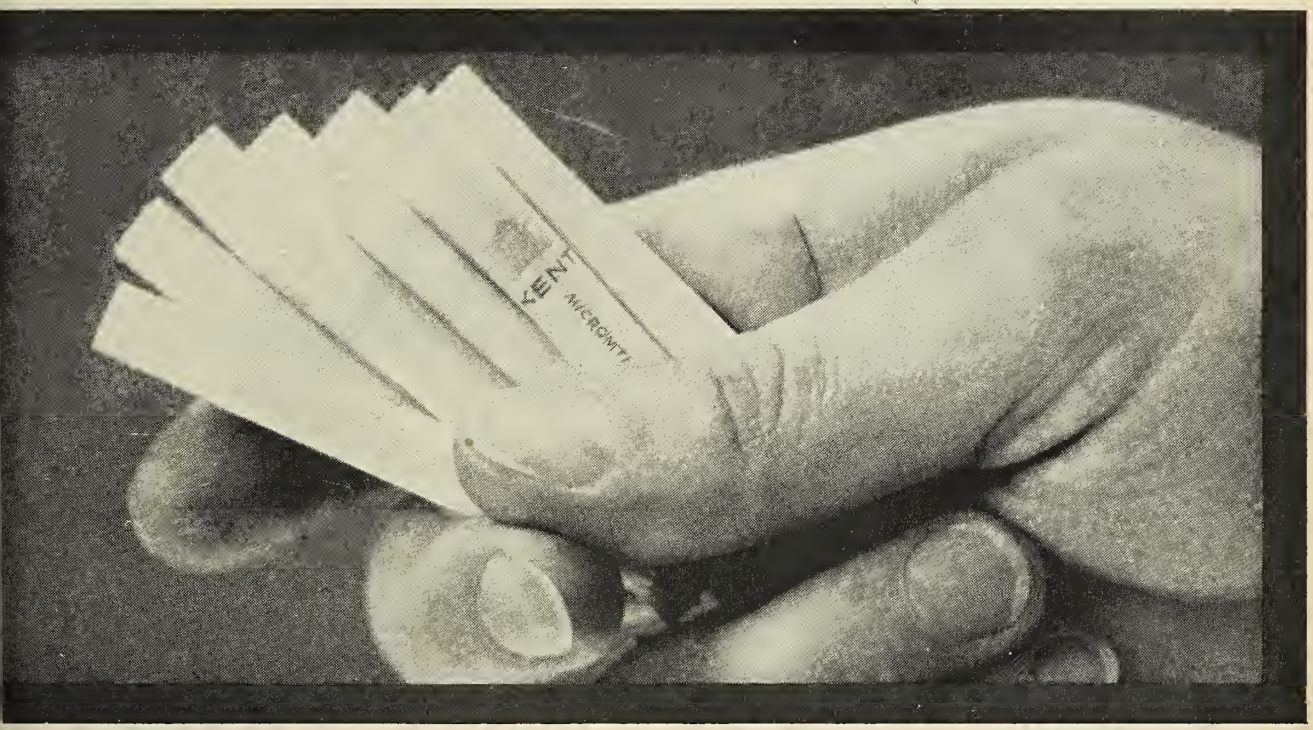
(Continued from Page 478)

statement is obtained from the National Foundation for Infantile Paralysis that every lot of vaccine released for use in Michigan is antigenic; and (c) until a clear statement from the National Foundation for Infantile Paralysis is obtained as to who, if anyone, accepts the responsibility for any untoward result that might occur upon the use of the vaccine and/or the control substance.

Motion carried.

- **Legal Counsel J. Joseph Herbert** was requested to study the jurisdiction and limits of ethics and meditation committees, both state and local, and report to the Executive Committee of The Council.
- **Beaumont Memorial:** Progress report was presented by Chairman Otto O. Beck, M.D., Birmingham, who stated that $2,000 recently had been contributed by members of the Wayne County Medical Society; $300 by members of of the Oakland County Medical Society; and $400 in contributions had come direct to MSMS. The Beaumont Memorial will be dedicated on Saturday, July 17, 1954, and invitations are being sent to some 7,000 persons to attend this event on Mackinac Island.
- **R. G. Ferris, M.D.,** Birmingham, and **M. H. Pike, M.D.,** Midland, were appointed as members of the Subcommittee on Hearing Defects of the Child Welfare Committee; Ralph A. Johnson, M.D., Detroit, was appointed as a member of the MSMS Postgraduate Medical Education Committee for the unexpired term of E. D. Spalding, M.D., deceased; Nathan J. Frenn, M.D., Bark River, F. M. Doyle, M.D., Kalamazoo, and D. S. Smith, M.D., Pontiac, were appointed to the MSMS Tuberculosis Control Committee.
- R. H. Baker, M.D., Pontiac, President-Elect, was appointed official MSMS representative to attend the Ohio State Medical Association meeting in Columbus April 12-15.
- **Editor Wilfrid Haughey, M.D.,** Battle Creek, stated that the August, 1954, Number of JMSMS has been designated as the "Arthritis and Rheumatism Number."
- **Council Chairman William Bromme, M.D.,** Detroit, reported that the 1954 Michigan Clinical Institute had broken all attendance records with a total of 2,503 registrations, including 1,735 doctors of medicine.
- **The Executive Committee of The Council** accepted an invitation to act as co-sponsor of the Testimonial Dinner for Michigan's Foremost Family Physician, William J. Stapleton, Jr., M.D., Detroit, to be held in the Sheraton-Cadillac Hotel in Detroit on May 11 and sponsored by Wayne University Medical Alumni Association and by the Wayne County Medical Society.
- **A special Committee** to meet with American Legion representatives was appointed: William Bromme, M.D., Chairman, Detroit; R. H. Baker, M.D., Pontiac; L. W. Hull, M.D., Detroit; Ralph A. Johnson, M.D., Detroit; Grover C. Penberthy, M.D., Detroit; Mr. J. Joseph Herbert, Manistique; L. Fernald Foster, M.D., Secretary, Bay City. The committee will meet with the American Legion representatives on March 12.
- **At the invitation of C. D. Selby, M.D.,** of the University of Michigan School of Public Health, the Executive Committee of The Council agreed to be a co-sponsor in a proposed course in gerontology.
- **1955 Michigan Clinical Institute.** The personnel of the Committee on Arrangements was presented and approved by the Executive Committee. The theme of this 1955 MCI will be "What's New For You, Doctor, That You Can Use!"
- **Max L. Lichter, M.D.,** Melvindale, was authorized to attend the AMA Conference on Civil Defense in June.
- **J. Duane Miller, M.D.,** Grand Rapids, reported on activities of the Permanent Conference Committee, including comprehensive survey of nursing needs in Michigan.
- **The monthly progress report** on rheumatic fever centers' activity was presented by Leon DeVel, M.D., Grand Rapids, Rheumatic Fever Coordinator.
- **Committee Reports**—The following reports were given consideration: (a) Child Welfare Committee, meeting of February 24, plus two subcommittee meetings; (b) 1955 Michigan Clinical Institute Committee on Program, meeting of February 25; (c) Mental Hygiene Committee meeting of February 25; (d) Maternal Health Committee, meeting of March 2; (e) Geriatrics Committee, meeting of March 4; (f) Legislative Committee, meeting of March 4, and subcommittee report.

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**English, A. R., et al.: Antibiotics Annual (1953-1954), New York, Medical Encyclopedia, Inc., 1953, p. 70.*

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Heart Beats

FRANK VAN SCHOICK, M.D.

Elected Michigan Heart Association President



F. Van Schoick

"The expansion of present activities in the field of cardiovascular diseases and the development of new projects must be continued year after year if the Michigan Heart Association is to maintain its course as one of Michigan's outstanding voluntary health agencies," was the challenging statement made by Frank Van Schoick, M.D., of Jackson, when he was inaugurated President of the Michigan Heart Association on Friday, March 12, 1954.

"The programs established by my illustrious predecessors are positive evidence of the benefits which a *voluntary* health agency can provide to a community," Dr. Van Schoick added.

The Association elected Dr. Van Schoick at its Fifth Annual Heart Day which was held in Detroit in conjunction with the Michigan State Medical Society's Clinical Institute.

Defense Secretary Charles E. Wilson was re-elected Chairman of the Association's Board of Trustees. Mr. Wilson was instrumental in the formation of the Association five years ago.

Other officers elected by the Association at its annual meeting were: President-Elect, L. Paul Ralph, M.D., Grand Rapids; Vice Presidents, Mr. Frank N. Isbey, Detroit, Mrs. Fred Miner, Flint, and Carleton Dean, M.D., Lansing; Secretary, L. Fernald Foster, M.D., Bay City; Treasurer, Charles T. Fisher, Jr., Detroit.

Trustees elected at the annual meeting of members to serve a three-year term were: Mr. Stanley E. Beattie, Detroit; Moses Cooperstock, M.D., Marquette; Mr. Edward Cote, Detroit; Carleton Dean, M.D., Lansing; Leon DeVel, M.D., Grand Rapids; F. D. Dodrill, M.D., Detroit; Douglas Donald, M.D., Detroit; L. Fernald Foster, M.D., Bay City; Mr. Frank X. Martel, Detroit; Mrs. Fred Miner, Flint; Mr. Emmet Richards, Alpena; Donald Smith, M.D., Pontiac; and Myer Teitelbaum, M.D., Detroit. Mark Osterlin, M.D. of Traverse City was elected to fill the unexpired term of Mr. Edward T. Gushee.

Members of the Board of Trustees who were elected to serve on the Association's Executive Committee were: Frank Van Schoick, M.D., Jackson; M. S. Chambers, M.D., Flint; Mr. Frank X. Martel, Detroit; Mr. Edward Cote, Detroit; Mr. George A. Jacoby, Detroit; Mrs. Fred Miner, Flint; Henry L. Smith, M.D., Detroit; Mr. Frank N. Isbey, Detroit; Paul S. Barker, M.D., Ann Arbor; Leon DeVel, M.D., Grand Rapids; Douglas Donald, M.D., Detroit; L. Fernald Foster, M.D., Bay City; Carleton Dean, M.D., Lansing; L. Paul Ralph, M.D., Grand Rapids; W. B. Cooksey, M.D., Detroit; F. Janney Smith, M.D., Detroit; and Franklin D. Johnston, M.D., Ann Arbor.

Dr. Van Schoick made the following committee appointments following his election as President:

Research Committee.—Douglas Donald, M.D., *Chairman,* Detroit; John Littig, M.D., Kalamazoo; Franklin Johnston, M.D., Ann Arbor; Ralph Johnson, M.D., Detroit; James Fryfogle, M.D., Detroit; Donald Smith, M.D., Pontiac; Muir Clapper, M.D., Detroit; F. Janney Smith, M.D., Detroit; John W. Keyes, M.D., Pleasant Ridge.

Program Committee.—Henry L. Smith, M.D., *Chairman,* Detroit; Warren B. Cooksey, M.D., Detroit; Myer Teitelbaum, M.D., Detroit; Carleton Dean, M.D., Lansing; M. S. Chambers, M.D., Flint; Robert E. Fisher, M.D., Bay City; J. K. Altland, M.D., Lansing; Roy Tupper, M.D., Detroit; Paul S. Barker, M.D., Ann Arbor; James H. Fyvie, M.D., Manistique; H. S. Heersma, M.D., Kalamazoo; F. D. Dodrill, M.D., Detroit; Sibley W. Hoobler, M.D., Ann Arbor.

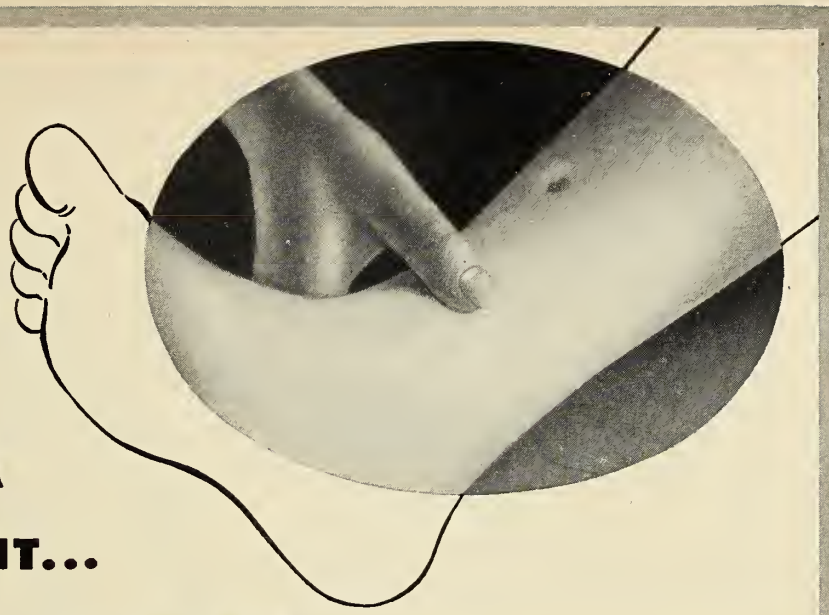
Finance Committee.—Frank N. Isbey, *Chairman,* Detroit; Charles T. Fisher, Jr., Detroit; J. William Hagerty, Detroit.

Memorial Contributions Committee. — Mr. George Jacoby, *Chairman,* Detroit; Mr. Frank N. Isbey, Detroit; Warren B. Cooksey, M.D., Detroit; Mrs. Fred Miner, Flint; Mrs. Hugh Wilson, Ann Arbor; Sidney Chapin, M.D., Dearborn.

Membership Committee.—M. S. Chambers, M.D., *Chairman,* Flint; Wm. P. Chester, M.D., Detroit; Seymore K. Wilhelm, M.D., Detroit; S. C. Wiersma, M.D., Muskegon; John Littig, M.D., Kalamazoo; Mrs. Hugh Wilson, Ann Arbor.

Committee on Cardiovascular Clinics.—Cecil Corley, M.D., *Chairman,* Jackson; John Murphy, M.D., Detroit; L. T. Colvin, M.D., Detroit.

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WINTHROP

1. Abramson, Julius, Bresnick, Elliott, and Sapienza, P. L.: *New England Jour. Med.*, 243:44, July 13, 1950.

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National Conference on Rural Health

The theme of the Ninth National Conference held in the Baker Hotel, Dallas, Texas, March 4 to 6, 1954, was "Let's Put More 'U' in the Community." The general chairman was Carl S. Mundy, M.D. of Toledo, Ohio. The conference emphasized the discussion-group type of program to a large extent. Each session included one or two brief papers and these then were the theme of a following discussion period. At these times small groups got together and discussed the various problems which they faced in their own localities in regards to the general theme of that particular session. These groups then reported back to the floor and a general discussion period ensued. It was felt that this was a very valuable method for a conference although in some instances the discussion period lasted quite long periods of time and it was difficult to keep the delegates together in the same thought when each would begin expressing individual opinions on the floor. However, this was not entirely objectionable and the accomplishments of the conference I believe could be said to stem largely from this increased discussion-period idea.

The main topics covered at the conference this year included voluntary health insurance, nutrition, community projects, and a general summary of the aims of the American Medical Association as presented by Dr. Edward J. McCormick, president of the AMA, and Mrs. Leo Shaefer, president of the Woman's Auxiliary.

Nutrition

The discussion on nutrition centered principally upon how to bring the ideas of better nutrition to the general population. It was felt that the most undernourished groups were teen-age girls and housewives, and various ideas were presented on how to emphasize to these groups the importance of proper diet. Another major topic was the question of over-nutrition and the ideas regarding the proper weight-balance factor for each individual were discussed. Also the school hot lunch program came in for its share of discussion. It was surprising the large percentage of schools represented which do have adequate hot lunch programs already in existence. The conclusion of this discussion upon nutrition was that the main factor should be increased educational programs to properly motivate the various groups throughout the country to maintain an adequate nutritional program for their area.

Health Insurance

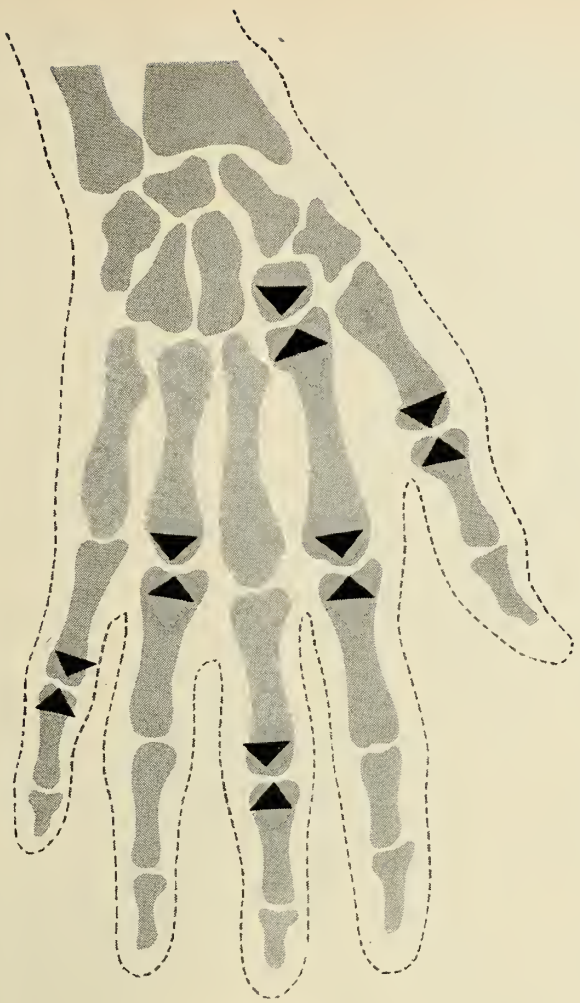
The program on health insurance got off to a bad start, in my opinion. The theme of the discussion was proposed by a rather young and inexperienced man from a commercial company (Provident) and the result was that the discussion never did get around to any of the basic difficulties facing the various voluntary non-profit health insurance programs of the country. However, there was considerable discussion regarding the various problems which do present themselves to the various Blue Cross-Blue Shield programs and it was felt that one of the major faults in our insurance program to date has been the lack of education to the policyholder. It was thought that the emphasis on our public relations regarding overusage, "the golden goose idea," should be directed towards educating the policy owner as to what Blue Cross cannot do. The idea being here that this would help reduce overuse and dissatisfaction with the insurance. This educational program therefore should be carried on at the consumer level equally as well as its direction towards the professional level. A further help along this line might be obtained from an article which was published in *Changing Times* relating to the cost of insurance and these pamphlets may be obtained from the National Blue Cross headquarters for distribution to any interested groups. This might give a lot of information to people who are interested in the various problems of voluntary health insurance.

Community Projects

This was the most interesting part of the program to all concerned. It discussed various areas and their solutions of the various health problems which beset them. There was a discussion of a home-aid hospital, a discussion of a doctor's answer to a community need for better health facilities given by Dr. J. Paul Jones, M.D., of Camden, Alabama, and a discussion on the proper distribution of doctors as given by the Texas Rural Health Committee Chairman, Dr. Chester U. Callen. These comments followed along quite similar ideas that are being followed in Michigan by the program of doctor placement as conducted by the Michigan Health Council. Dr. Jones has constructed his own community clinic and that is along the lines that the Michigan Rural Health Committee has been promoting in regards to helping communities obtain doctors by providing better medical facilities. The home-aid hospital idea simply meant that the community got together and raised enough funds to create proper hospital facilities for that area and did not use Hill-Burton funds.

One of the most thought-provoking ideas came out of this discussion, when Mrs. Esther Thorton, Superintendent of the Washington County Community Hospital at Akron, Colorado, presented a

(Continued from Page 488)



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(Continued from Page 486)

colored movie entitled "Jugs." This is a type of sorority idea on the high school level whereby a local community hospital creates help for themselves and at the same time creates interest in a nursing career among high school girls. The results in Akron, Colorado, have been nothing short of phenomenal in the spirit with which the high school girls take to hospital nursing procedures and the program which they have developed there. Also the amount of interest is shown by the marked increase in the number of girls applying and taking nurses' training from that area. This is well summarized in a very fine 16 mm. color-sound movie, developed by the Colorado Blue Cross and Blue Shield Association. A copy of this film may be obtained for a cost of $195.00 and it seems to this delegate that this movie would be worth its weight in gold for general distribution throughout Michigan communities because, as we all know, all communities are faced with a critical help shortage problem in their various hospitals. Also the decline in the number of nursing school applicants has been rather alarming, and once this film is viewed, I'm sure it gives an idea of where to start in regards to help. Especially the idea of providing more help for the hospitals and increasing the flow of trained nurses coming out of our nursing schools. I would urge the Council to investigate the possibilities of obtaining one or more copies of this film for showing throughout Michigan to schools, clubs, et cetera. It would be an excellent means of public relations and would give communities a definite idea of something to do about their health program.

Perhaps the most stimulating paper presented at the meeting was given by Mrs. Charlotte Benson, health education consultant for the Medical Society of North Carolina from Raleigh. She presented a very interesting discussion of the problems which they have faced in North Carolina regarding bringing better health to the rural areas. She conducted the theme of her discussion from the idea of a Health Council approach to their health problems in North Carolina and gave many interesting examples of how, generally speaking, the solution to each rural health problem is on a local level entirely. She stated, and it was borne out in the discussion that you cannot set up a set of rules that will apply to every community as direct orders. Because many communities simply do not want the ideas that have been promoted by some central agency and simply must work out their own solutions to their problems. This was very well brought out by Mrs. Benson and she was definitely the star of the meeting. If it ever were possible to obtain her services as a speaker or a discussion leader for a conference in Michigan regarding community health problems, it would be a definite advantage to do so. She is one very sharp individual.

Interestingly, too, a great amount of discussion centered on the fact that many of these problems are the direct responsibility of doctors themselves. It was felt by many of the lay people attending this meeting that doctors quite frequently do not fulfill their rightful job of citizenship. In fact, one man said that doctors should be citizens first, and then doctors second. And one could not help but deduce from this meeting that if doctors would interest themselves in their community problems, instead of burying themselves in their office or in their practices or hiding away at a golf game or a fishing session, that many of these problems confronting the communities in regards to proper rural health would be much easier and much more satisfactorily solved with the professional advice that a doctor could give. I felt so strongly about this, that I wish the Council could consider some means of properly publicizing the nature of a doctor's responsibility as a citizen to his community. I think that our public relations have been neglecting this in the past few years.

In summary, I would say that this National Conference on Rural Health was a very well conducted affair and it highlighted many of the problems which each state and local community faces in its desire to obtain better health facilities. I hope that in the months to come, I may be able to further implement my ideas obtained at this conference by the meetings with the Michigan Committee on Rural Medical Service.

I wish to take this opportunity to thank the Council of the Michigan State Medical Society for your confidence in appointing me as delegate to this meeting. It was a thoroughly enjoyable experience, and I wish to thank you very much for this consideration.

BROOKER L. MASTERS, M.D.

Ewing's tumor of bone is a highly radiosensitive lesion.

* * *

In treating any bone tumor, the radiologist should remember that the neoplasm extends longitudinally for a considerable distance beyond the area shown on the roentgenogram.

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Intraoral cancer accounts for approximately 8 per cent of all human malignant disease.

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Adenomas, sarcomas, and occasionally squamous cell carcinomas originate in aberrant salivary tissue.

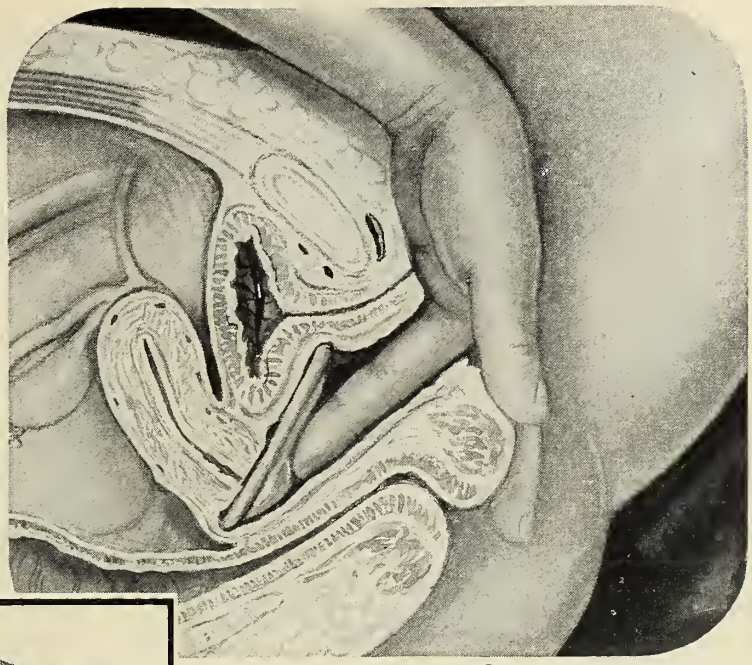
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Frequently a cancer involving the gingiva and hard palate may be obscured for indefinite periods of time by a denture and be considered a trophic ulcer.

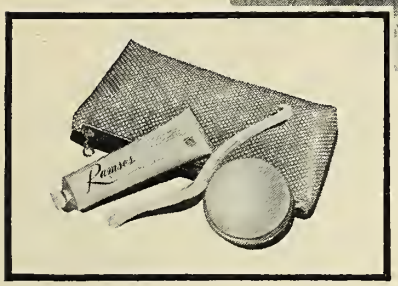
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PR REPORT

OFTEN FORGOTTEN is the importance of the primary election and the elementary political fact that small, organized groups can control the selection of party candidates when there is little general interest. That is exactly what certain groups, whose interests are inimical to the medical profession, are planning to do.

This year is a non-presidential election year, and broadly speaking there is little interest in the election to date. The Michigan primaries will be held August 3, a month earlier than is the custom, leaving May and June none to early for "get out the vote" preparations and other intensive activities in behalf of good government via effective representation in Lansing and Washington Events in the 1954 Legislature indicate in particular that the individual M.D. should consider it his duty to serve the welfare of the people of Michigan by giving active support to candidates for the Legislature in the August primary who have demonstrated they understand the need for maintaining high standards of medical care, and who are pledged to maintain these standards.

This year, more than ever, the doctor of medicine should study the qualifications and background of the candidates seeking seats in the State Senate and House of Representatives. In several districts, the reapportionment amendment voted in 1952 will have its first effect. Ten new members will be elected to the House and two more will be added to the Senate. Several of the present legislators will not run again. All in all, there will be quite a turnover (probably 40 per cent) in both houses of the Legislature, placing added importance on the careful selection of candidates in the primary election.

ALMOST 800 BILLS and resolutions were introduced in the 1954 session of the Legislature. Of these, MSMS carefully followed the progress of 76 which had aspects of importance in the fields of medicine and health, giving each careful study, and gathering authoritative opinion and advice which was placed at the disposal of legislators. Had it not been for the interest and counsel of MSMS and its members, a number of dangerous or unwarranted measures might have been written into the statutes. Among these, for example, were proposals which would have: Allowed chiropractors to practice in fields far beyond their qualifications; legally established chiropractic as a profession; implied that osteopaths are medical practitioners by entering the phrase "osteopathic medicine" in Michigan law; taken away the protection afforded Michigan by the Basic Science Law; killed the Crippled Children's Act, for all practical purposes, and originated at least two new bureaus or commissions with unusual and unnecessary influence on state activities in health, medical care and rehabilitation.

Reviewing a few measures on the constructive side, the 1954 Legislature, with MSMS urging, took positive action to: Strengthen tuberculosis control; safeguard the eligibility of Michigan residents for Federal welfare benefits by permitting hospital regulation to the extent necessary to comply with Federal requirements but no further; improve administration of the Basic Science Law by clarifying its language and intent; provide more adequate appropriations for mental health, public health and tuberculosis, and allow rehabilitation of drug addicts without branding them as criminals.

NOTE TO COUNTY MEDICAL SOCIETY officers and PR chairmen: Have you selected all your PR projects for the year and put them in action? Many societies are well along in their plans to widen PR activity, setting up new projects for the spring and summer, and aiming for even greater action next fall. Ideas for new and effective projects are outlined in the PR guidebook presented by MSMS and distributed at the last PR Conference in Detroit. Additional copies of this book are available at MSMS headquarters. Counsel and suggestions for implementing the projects are available through the MSMS Public Relations Department in Lansing.

In determining upon new activities, evaluate your present program and discover the fields in which you lack strength. Then select whatever projects will bolster the weak spots. MSMS Field Secretaries are at your service to help you to initiate these programs.

MEDICAL STUDENT ENROLLMENTS

The fifty-third annual report on medical education of the American Medical Association's Council on Medical Education and Hospitals states "enrollments in tne country's seventy-two medical and seven basic science schools during 1952-53 totaled 27,688 (2.3 per cent) more than the 27,076 enrolled during 1951-52. The 6,668 students graduated during the last year exceeds by 279 (4.4 per cent) the previous record established in 1947, when at the termination of the accelerated program several schools graduated more than one class. The estimated number of graduates for 1953-54, based on enrollments reported for senior classes in schools is even greater—6,831." There was, however, a slight decrease in the size of the entering freshman class for the first time in five years—7,425, or sixteen less than the record class of 1952-53.—*New York State Journal of Medicine*, Feb. 1, 1954.



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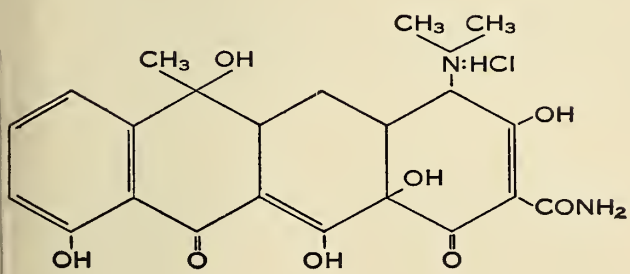
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Basic Science Law has "New Look"—and New Outlook

With what is believed to be the last stumbling block removed by the 1954 Legislature, Michigan can now look forward to seeing its Basic Science Law function as it was intended it should function. That is the feeling among Michigan State Medical Society leaders who had a part in carrying out instructions of the 1953 House of Delegates that the law be made more workable.

An Attorney General's opinion, written in response to a request by the former chairman of the Basic Science Board, placed a strict interpretation upon the wording of the 1952 amendment, which was not in accord with the intent of the 1952 Legislature. This resulted in a bottleneck which hindered rather than helped the influx from other "Basic Science" states. The number



AMENDMENT BECOMES LAW

Among those who stood by as Governor G. Mennen Williams (seated) placed his signature on the act giving immediate effect to the amendment clarifying the Basic Science Law were *(standing, left to right):* Carl Hoppert, Ph.D., Michigan State College professor recently appointed to the Basic Science Board; A. DeWitt Brewer, MSMS associate public relations counsel, and J. Earl McIntyre, M.D., secretary of the State Board of Registration in Medicine.

Always considered a good law if properly administered, in the viewpoint of MSMS, the Basic Science Law is a major safeguard in maintaining high standards of practice in medicine and in eliminating the untrained among those who seek to enter the healing arts. When previously amended in 1952, under guidance of MSMS, the law was rewritten in part with the intention of making it easier for applicants who had previously qualified in one of the 19 other "Basic Science" states to get Michigan certificates on waivers.

of applicants approved on waivers by the Basic Science Board dwindled to almost nothing.

With this background, the three licensed groups falling within the provisions of the Basic Science Act met at the Governor's request last November and December to explore what might be done to break the Basic Science bottleneck. From these two meetings came the "official" amendment agreed to by doctors of medicine and representatives of the other two groups.

(Continued on Page 496)

Meats-in-a-Can

and Kitchen-Cooked Meats... Comparative Nutritive Values

From a practical dietary standpoint, meats-in-a-can—preserved by commercial canning—are nutritionally interchangeable with meats of like variety prepared in the home.[1] For taste appeal, for economy and "keeping" quality, and for household convenience, meats-in-a-can are advantageous in many respects.

As the comparative data here shown indicate, kitchen-prepared meats and similar meats-in-a-can are closely alike in the amounts of various nutrients they provide.

COMPARATIVE COMPOSITION OF KITCHEN-COOKED AND COMMERCIAL-CANNED MEATS
(Nutrient Amounts per 100 Grams)

	*Kitchen-Cooked Ham[2]	**Canned Ham[3] (Chopped, Cured)	Kitchen-Cooked Beef Round[2]	Canned Roast Beef[2]
Water	50%	50%	59%	60%
Protein	21 Gm.	20 Gm.	27 Gm.	25 Gm.
Fat (ether extract)	28 Gm.	20 Gm.	13 Gm.	13 Gm.
Niacin	4.0 mg.	4.3 mg.	5.5 mg.	4.2 mg.
Riboflavin	0.21 mg.	0.19 mg.	0.22 mg.	0.23 mg.
Thiamine	0.46 mg.	0.40 mg.	0.08 mg.	0.02 mg.

*Values after conversion from 42% to 50% water basis.
**Values after conversion from 58.69% to 50% water basis.

Experimental studies have shown that the processing which meats-in-a-can undergo leads to little if any greater vitamin losses than does home-cooking of similar cuts of meat. In general, meats-in-a-can retain of their original vitamin content approximately:

60 to 80 per cent of thiamine
90 to 100 per cent of riboflavin
90 to 100 per cent of niacin
80 per cent of biotin
70 to 80 per cent of pantothenic acid.[4,5]

During storage for customary periods, at usual warehouse temperatures, meats-in-a-can show little, if any, further vitamin loss except in thiamine. Even thiamine, a highly thermolabile vitamin, was 52 per cent retained in pork-in-a-can after ten months' storage at 80° F. Retention of the vitamin was notably greater when the canned pork was stored at 38° F.

Since meats-in-a-can are thoroughly cooked in processing, they may be consumed as purchased, merely warmed or mildly cooked. When the meat is moderately cooked in preparation for consumption, little or no further loss in vitamins need to occur.

Recent studies show that meats-in-a-can are excellent sources of needed amino acids.[6] The 18 amino acids determined in these studies appeared in similar ratio and amounts in canned beef, pork, and lamb as in the respective fresh or home-cooked meats.

1. Howe, P. E.: Foods of Animal Origin, Handbook of Nutrition, American Medical Association, ed. 2, Philadelphia, The Blakiston Company, 1951, p. 637.

2. Watt, B. K., and Merrill, A. L.: Agricultural Handbook No. 8, United States Department of Agriculture, 1950.

3. Schweigert, B. S.; Bennett, B. A.; Marquette, M.; Scheid, H. E., and McBride, B. H.: Food Res. *17*:56 (Jan.) 1952.

4. Rice, E. E., and Robinson, H. E.: Am. J. Pub. Health *34*:587 (June) 1944.

5. Schweigert, B. S.: Am. Meat Inst. Foundation, Circular No. 8, Nov. 1953.

6. Schweigert, B. S.; Bennett, B. A.; McBride, B. H., and Guthneck, B. T.: J. Am. Dietet. A. *28*:23 (Jan.) 1952.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.



American Meat Institute
Main Office, Chicago . . . Members Throughout the United States

(Continued from Page 494)

This amendment was introduced early in the 1954 Legislative session as Senate Bill 1082. It quickly cleared the Senate, then went to the House—where it became the subject of considerable discussion—eventually passed, and was given immediate effect when signed by the Governor on March 26. In the House, an abortive attempt to repeal the Basic Science Act by introduction of another bill complicated the outlook for a short time.

Lacking open backing by recognized organizations, the repeal measure died in committee.

A special Basic Science Study Committee, authorized by the House of Delegates, both in the 1952 and 1953 meetings, represented MSMS in discussions on the "official" amendment and made recommendations on MSMS policy to the Executive Committee of The Council. Currently serving on this study committee are H. A. Furlong, M.D., Pontiac, Chairman; D. V. Thorup, M.D., Benton Harbor; and C. E. Umphrey, M.D., Detroit.

With new leadership and every indication of a renewed spirit of enlightened administration of the law, the Basic Science Board has set about to reduce the backlog of applicants which piled up during the months following the 1953 Attorney General's opinion. It appears that time will prove the wisdom of the MSMS House of Delegates in recommending that the Basic Science Law be retained as a safeguard to the welfare of the people of Michigan, yet be framed in the most workable manner. Now, with sound administration, the Basic Science Law can protect Michigan from unqualified practitioners, and still make it easier for many needed doctors of medicine to enter practice in this state.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954

June 8	Bon Secours Hospital Annual Clinic Day	Detroit
June 18	Annual Clinic Day, St. Clair County Medical Society	St. Clair Inn, St. Clair
June 18-19	Upper Peninsula Medical Society Annual Meeting	Menominee
June 21-25	AMA Annual Session	San Francisco
July 17	Beaumont Memorial Dedication	Mackinac Island
July 29-30	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
Sept. 29-30 thru Oct. 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
November 3	Clara Elizabeth Fund Lectures Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

UPPER PENINSULA MEDICAL SOCIETY

59th Annual Convention—June 18, 19, 1954

Riverside Country Club, Menominee, Michigan

ADOLPH SANS, M.D., Professor of Neurology, University of Iowa School of Medicine, will speak on "Strokes, Differential Diagnosis."

ALLEN C. BARNES, M.D., Professor of Obstetrics, RICHARD B. CAPPS, M.D., Associate Professor of Medicine, Northwestern University, will speak on "Diagnosis and Treatment of Liver Disease."

MR. HARVEY V. HIGLEY, Administrator of Veterans Affairs, Washington, D. C., will be the Guest of Honor.

These are the names of just a few of the men you will hear.

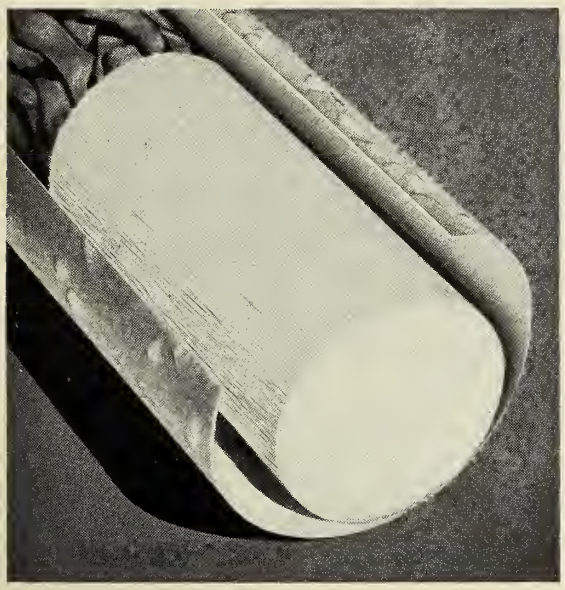
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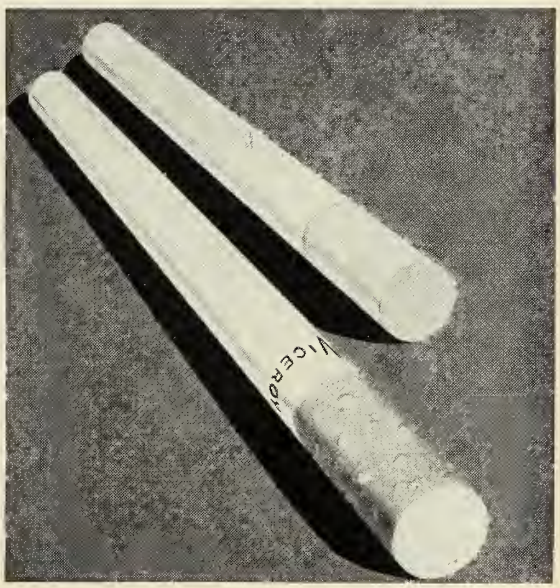


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2. PLUS KING-SIZE LENGTH
The smoke is also filtered through Viceroy's extra length of rich, costly tobaccos. Thus Viceroy actually gives smokers *double the filtering action* . . . to double the pleasure and contentment of *tobacco at its best!*



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Visitors at Eli Lilly & Company



Physicians from Branch and Calhoun Counties, who visited Eli Lilly and Company, March 16-18, 1954, are pictured above. While guests of the company, they inspected the Lilly Research Laboratories and toured pharmaceutical, biological, and antibiotic production facilities.

Among those included in the group were Dr. Hugh Robbins (third row, third from left), medical director of Calhoun County, and his wife (fourth from left); Dr. Henry Gomley (third row, fourth from right), president of the Branch County Medical Society, and his wife (third from right); Dr. Salvadore Yanatelli (third row, second from left), director of the Arthur S. Kimball Sanitarium in Battle Crcek, and his wife (second row, second from left); Dr. Ernest Jones (last row, extreme right), manager of the Veterans Administration Hospital in Battle Creek, and his wife (second from right); and Dr. Ed Rennell (fifth row, fourth from right), director of the State Training School of Coldwater, and his wife (third from right).

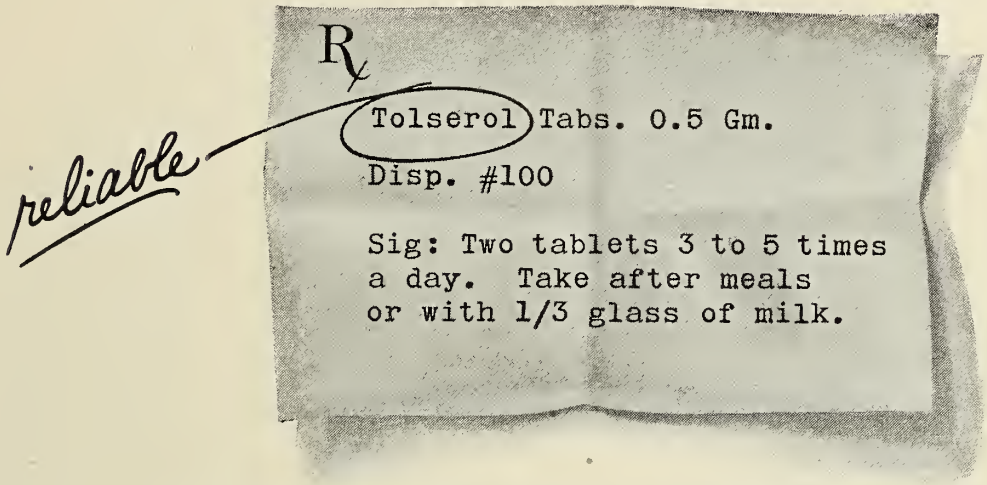
At the extreme right of the first row is W. A. Lindwall, Lilly representative in Battle Creek, who accompanied the group to Indianapolis.

MEDICAL TELEVISION SHOWS OVER WJBK-TV

Sponsored by the Michigan Health Council

Date	*Subject*	*Guests*
February 14, 1954	Rheumatic Fever	Manes Hecht, M.D., and Norman E. Clarke, M.D., Detroit
February 21, 1954	Development of Cortisone	E. L. Burbidge, M.D., and H. F. Hailman, M.D., Kalazoo
February 28, 1954	Dental Health	Arthur V. Diedrick, D.D.S., of Detroit; Charles W. Harling, D.D.S., of Grosse Pointe, and Fred Wertheimer, D.D.S., of Lansing
March 7, 1954	Rehabilitation	George H. Koepke, M.D., and Mrs. Marian French, Ann Arbor
March 14, 1954	Your Doctor's Clinical Institute	L. W. Hull, M.D.; Ralph A. Johnson, M.D., and Eugene A. Osius, M.D., Detroit
March 21, 1954	The Industrial Nurse	Allenc Haines, R.N., Vicksburg; Alverta Wenger, R.N., Plymouth; Evelyn M. Johnson, R.N., Detroit
March 28, 1954	New Hope for Hearts	Henry L. Smith, M.D., Detroit
April 4, 1954	Home Nursing Care	Gerald Wilson, M.D., Mrs. Alexander Paradzinski, R.N., and Mrs. Ann Cole, R.N., Detroit

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SQUIBB

AMA News Notes

FINDINGS OF FIRST YEAR'S STUDY OF DOCTORS IN SERVICE

Results of the first year's survey of physicians leaving active military service are carried in a report recently issued by the AMA's Council on National Emergency Medical Service. Information obtained from this continuing questionnaire study is being used as the basis for a series of conferences with Department of Defense and Armed Forces representatives in an effort to improve the utilization of medical personnel and the formulation of a more effective voluntary officer procurement system.

During the first year of the study—July 15, 1952, to August 1, 1953—a total of 3,948 completed questionnaires revealed that the average time spent in service was 24.7 months; average tour of duty in U. S., 7.6 months; average tour of foreign duty, 17.1 months. Twenty-nine per cent felt there was overstaffing, 20 per cent understaffing and 51 per cent adequate. Of those assigned to domestic duty, 53.4 per cent were engaged in treating military personnel, 28.3 per cent in treating military dependents and 18.3 per cent in "other"; while of those assigned to overseas duty, 51.8 per cent treated military personnel, 23.8 per cent dependents of military personnel and 24.4 per cent "other." Answers to the question regarding the *type of medical care* provided for *other than* military personnel indicate that in the Army and Navy the most frequent type was outpatient care, while in the Air Force it was obstetrics and gynecology.

Regarding the question, how national and local medical associations can better serve their members in service, the following activities were suggested—more information via a newsletter, etc.; personal visits by civilian doctors to evaluate grievances; invite military doctors to civilian medical meetings; assist in locating position after discharge; assist in preventing evasion of military service; distribution of questionnaires to physicians in service; provide specialists for clinical conferences.

STOP THOSE HIGHWAY KILLERS!

Tragedy on the highway caused by Highway Killer Number Three—the drinking driver—is aptly depicted in a new exhibit now being offered to local medical societies by the AMA's Bureau of Exhibits. "Alcohol Tests for Drinking Drivers" points up the fact that the drinking driver ranks third in traffic violations resulting in fatal accidents and is led only by violations of excessive speed and failure to keep on the right side of the road. Advantages and disadvantages of different methods of testing the drinking driver are visually demonstrated in this attractive exhibit, and a series of simulated windshields show the progressive changes in the drinking driver's vision through the four stages—sober, fuzzy, dizzy and drunk.

Prepared by the AMA in co-operation with the committee on chemical tests for intoxication of the National Safety Council, this exhibit also shows that drinking pedestrians account for one out of four pedestrian deaths. This exhibit will be available on a loan basis after April 15.

EXHIBIT PLUGS DOLLARS FOR MEDICAL SCHOOLS

To speed up the dollar drive for funds for our nation's medical schools, several medical societies this spring are featuring the American Medical Education Foundation's attractive exhibit at their local meetings. A recent check of the exhibit's travel schedule shows that it will be at the North Carolina State Medical Society meeting May 3-5 in Pinehurst and at the South Dakota State Medical Association meeting May 15-18 in Huron. It was scheduled for the Alabama Medical Association convention April 15-17 in Mobile.

This cleverly designed exhibit, features a map of each state with the amount of money and number of contributors chalked up during the past year. In addition, a bar chart depicts the current goals of both the National Fund for Medical Education and the AMEF. Medical societies interested in displaying this exhibit should contact the AMEF headquarters in Chicago.

SICKNESS INSURANCE FOR INDUSTRIAL WORKERS

The Antiseptic, a monthly journal of medicine and surgery, published at Madras, India, in an editorial says:

"Inaugurating the Madras Regional Board of the Employe's State Insurance Corporation on 12th November 1953 at Madras, Shri V.V. Giri, the Union Labour Minister said, 'The employers who have been paying the special contribution all these months have reason to be restive and it is our duty to allay their misgivings by tangible evidence of the Government's ability to implement the Scheme and thereby give due return for their contributions. It will be one of the duties of the Regional Board to ensure that better progress is made in such implementation throughout the country, and that a better standard of service and satisfaction is rendered to the industrial workers.' There no doubt exists a popular feeling and a general impression that if the Regional Boards had been set up at the same time as the Regional Office was opened in February 1952, much headway might have been made and the Board would by now have familiarized itself with the problems incidental to or necessary for a successful implementation of the scheme in many industrial centres in the region."

This is the opening of a long editorial showing no benefit whatever after a long period of having made insurance payments.



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Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 53 MAY, 1954 NUMBER 5

Preventive Geriatrics

The Plan

THIS PRESENTATION represents a new type of project. It is best described as a panel discussion carried on by mail. The panel was made up of the discussants quoted and the members of the Geriatrics Committee. The paragraphs uninitialed represent the will of the committee. The initialed paragraphs represent the thought of a member of the committee. All other material is accredited to its author.

The Committee

The committee making this report was appointed by the Michigan State Medical Society to study the geriatric problems of the State of Michigan. Since geriatrics is defined as that branch of the medical sciences which has to do with the diseases of the aged individual it seemed at first glance that the work of the committee was rather well defined.

The Work of the Committee

A closer study revealed, however, that the so-called degenerative diseases usually associated with the aging man were in our modern times being found in greater numbers in the more youthful individuals. Many of the diseases associated with childhood or the young adult period were occurring in the later years. It was also quite evident before many meetings of the committee that the aging group itself was very poorly defined inasmuch as many members who were definitely past the accepted limit of sixty-five years actually had many of the physical, mental, and emotional attributes of the people of the forty age group, and many of those in the forty age group had some of the so-called stigmata of the aged. Thus, we had not gone very far in our study when we realized that the association of certain specific diseases with chronologic years was not as hard and fast as we originally believed. Also, that the concept of an aged individual does not necessarily depend upon his chronologic years and that as yet we do not have a very good set of criteria as to what constitutes physiologic aging. In fact, perusal of the literature to date gives us a very indecisive criteria as to what are the effects of the passage of time on the organism and what are the effects of pathologic aging.

The work of the committee which started out in such a well-defined limited area turns out to be vertically and horizontally limitless. Every facet of the relation of an individual to his environment both internal and external, and particularly those associated with the passage of time come into the province of the committee's work and interest.

The succeeding paragraphs will outline the size and some of the ramifications of the problems touched on by the committee and how the concept of preventive geriatrics arose.

Time Perception—Past

The strategy of some industries which started some years ago of retiring workers as worthless after they had reached the age of sixty-five has left a definite imprint on the scientific and lay thinking regarding gerontologic problems. This erroneous concept isolates a large part of our population who, although they do not represent a homogenous group except for the one criterion of age do present many problems in common and for the momcnt will be considered together to illustrate the size of the problem. One hundred years ago 2.6 per cent of our population was sixty-five years of age or over and this group represented about 602,000 individuals. Now approximately 7.7 per cent of our population are sixty-five years of age or over and represent a total of about 12,300,000 individuals. In 1980, this group will represent in excess of 15 per cent of our total population, and the number of individuals will be near 25,000,000.

At this point, it must be quite obvious to the

Prepared under the supervision of the Geriatrics Committee of the Michigan State Medical Society. For personnel, see Page 535.

students of the problem that if life were to continue on after sixty-five with the same emphasis on time perception regarding the future as is the case of the group just passing thirty, this mere shift in the quality of our population would pose very few serious problems. (FCS)

Time Perception—Present

To be a member of the aged group at the present time is to be included among the disabled and the chronically ill. Labor and industry have made a great segment of this number worthless from a physical, mental, and emotional standpoint. This same group as well as many others have been inadequately provided for economically. The size of the total group is probably contributed to largely by inclusion of a great number who might well be termed refugees from the infectious diseases of earlier life and are now candidates for the chronic diseases. To cope with chronic disease calls for a greater financial outlay than does the attack on acute—usually short-lived—infective type of disease. This cannot be taken to mean that the battle against acute and largely epidemic disease was easy but only that it was of a different type. In the early days a courageous individual could by stealing the handle to the town pump or by vaccinating a host of people stop an epidemic in its tracks without much continued effort on the part of the population. In our conflict with chronic disease we are in a different type of struggle. This is a hand to hand grapple on an individual basis which began with birth and continues throughout life. The people must be educated and learn to live by all the new concepts of preventive medicine not for a day but always—no simple "shot" in the arm will confer immunity from the degenerative diseases of man. The rebirth of rehabilitation for both the younger and the older age groups also means an increase in economic and time load for the producer. To provide medical, social, financial, occupational, recreational, and rehabilitative measures for this ever increasing group is to add such an economic load to the one yet in the productive field that our present standard of living must definitely be affected unless we can offer a positive program that will change the above indicated trends. In England, at the beginning of the century, fourteen workers were available for the support of each oldster. By 1950, the burden of old age had been doubled and one oldster had to be supported by seven workers. (FCS)

Our present methods of retirement are both sinful and wasteful. After many years of training and experience, human beings are thrown on the scrap heap with some of the finest human attributes having been brightened rather than dulled by time. Only time can purchase such a high degree of consistent loyalty and "know how." Retirement in its purest form should exist in the following two phases only: Voluntary retirement which depends entirely upon the wishes of the retiree and the compulsory type which would separate a man from his job because of physical, occupational, emotional, or mental reasons. The remuneration of the former would depend on the time in service and the remuneration of the latter would depend on the character of the disability, as well as the time in service. (FCS)

Even realigning of the retirement regulations does not do away with the necessity for a certain type of education for retirement. It is pretty well agreed that the only healthy concept for the worker is to retire to something and not to retire from something. Disease and boredom soon take their toll of the retired who are unhappy and unoccupied.

The committee devoted much time in the study and discussion of the adequate care of the older individual who is without responsible relatives to provide a home for him, adequate building programs that include some types of provisions for the aging individual, more and better suited convalescent hospitals where those who are marginal patients both from the standpoint of illness and economics can be cared for at the least cost to the patient and the community, and above all a great educational program directed toward the doctor, the aged and the young who will someday be old. This program should call to the attention of every living soul the place of the aged and the aging in our world, their contributions, the necessity for their being considered individuals, the right for them to take their place in the production line as long as it is physically and mentally possible, the obligation of our civilization to provide for the aged as well as every other individual the opportunity of working. (FCS)

Rehabilitation problems in this aged group have also become the subject of this committee's efforts. These are environmental, psychiatric, and mental as well as physical. The experience of many in this field has shown that the efforts are physically, mentally and emotionally worthwhile and economically expedient.

Because of the fact that convalescent homes hold a possible answer to some of these problems, they, too, have come under the scrutiny of the committee. What kind of problems can best be handled in a convalescent home, what type of convalescent homes are available, what should be the training of directors of these homes, what kind of standards should be set up at the state level so as to provide good types of treatment for the patients, were some of the problems discussed at various meetings.

The problem of two generations living in one home comes under the study of this committee. Something must be done to make these situations more compatible. Certainly there is no way to separate the generations in the foreseeable future. An educational program directed toward both generations should be productive of some results.

The material which must go into such educational efforts should be spelled out in the near future.

Time Perception—Future

The study of this political and economically important group which are now past sixty-five and which are now subject to our present laws of retirement and who have made very little preparation for such retirement constitute at present the bulk of the gerontologic problem. Included here are those who passively sit on the front porch and watch the children go to school or sit by the fireside and knit trying to make ends meet on their retirement pay or social security income, or those who pass much of their time at recreational centers provided for the aged by labor unions or church groups or those whose major interest centers in the bingo hall, or those who have sufficient funds to spend a great deal of their later years in travel or those few dynamically interested citizens who are contributing their talents to school boards, hospital drives, etc., or those who motivate their passing days by being interested in work shops of one type or another and those who shout enthusiastically for the Townsend Plan. This potential giant, like an infant purposelessly flexing his muscles in every direction, may someday with the help of an inspired leader show such coordination of purpose and effort as to mold our present method of government and finance to his will. For this and many other reasons solutions must be forthcoming. (FCS)

Education of the Physician

One of the major facets in the program of any geriatric committee must be the education of the physician himself. Every member of this committee at one meeting reported at least several instances where sick calls were refused by physicians stating that they did not take care of people of the advanced age group. Probably even more harmful to the satisfactory care of this group is the attitude of some physicians who take care of the older individual but do it with remarks, "What can you expect at this age in life?" or, "We can't make a new machine with old parts." The potentialities and possibilities of an oldster recovering from any given insult is equally as unpredictable and miraculous as in any age group in life. The sooner the physician realizes this and approaches the problem with some hopefulness in his attitude, the better will be our results. (FCS)

Cultivation and Conservation of Personal Assets

It became very apparent in meeting after meeting that the group we were supposed to be studying was quite an ill-defined one because we did not know any good active criteria for physiologic aging. Moreover, chronologic aging was a very artificial method for establishing groups. Because of the experience of some large centers in rehabilitating the older individual both from the standpoint of mental, emotional, and physical defects, and also because of the comparison of numbers of individuals in the same chronological group from the standpoint of the variability of their usefulness, it was evident that many of the better attributes could probably be cultivated through some educational effort directed toward the young individuals. These have to do with keeping up a certain amount of physical exercise and mental gymnastics so that the physical and mental horizons do not close in on one as he grows older. This type of educational program certainly ought to add more living to longevity. (FCS)

The battle ground of the men against death is about to be transferred from the field of acute infectious diseases to the more chronic diseases of man. In this approach we need to know more about heredity, problems of growth, problems of physical, mental and emotional development, adjustment to environment, and primary and secondary prevention of disease entities. Not very much really unbiased and unprejudiced knowledge of the above factors exists. If this were available it would help us in our geriatric investigation. Some of the things we think we know constitute a major hazard in designing research and investigative work. What is and what is not due to the aging process is still a matter of a great deal of controversy. (FCS)

The Preventive Geriatric Concept

How we can prevent the development of many of these problems became the theme of practically every meeting of this geriatric committee. It was decided to test the validity of preventive geriatrics as a concept. Were there any unbiased, unprejudiced, scientific data in the literature which might fundamentally support the idea? To find out if the opinion of some current authorities might lend weight to the concept of preventive geriatrics, the following letter was sent out to a number of students in the field.

The Subject for Panel Discussion

"For some time the Geriatric Committee of the Michigan State Medical Society has been studying the problem of aging. From the medical standpoint for the purposes of this letter the problem seems to resolve itself into two phases. First the apparent deterioration in the biologic processes of all living matter—senescence; and second, the disease processes superimposed upon senescence.

"A large part of the geriatric literature up to the present time has concerned itself with making observations on the progress of senescence and the superimposed diseases. Most seem to feel the phenomena observed are as certain as death itself.

"But since there is such a marked variation in the rate of senescence in certain individuals, since our older

group now represents more physical and intellectual vigor than a similar group of fifty years ago, since there is at least some evidence of rejuvenation of a few of the more hardy souls who find new mates or interest in their later years, and since superimposed diseases might well be prevented or modified by application of certain principles of preventive medicine, the question naturally arises: What would be the possibility of formulating a body of logical postulates from all the disciplines involved that would retard deterioration now associated with senescence and prevent or postpone the diseases generally associated with the aging group?"

The preventive geriatric approach has been mentioned only infrequently before this time. It assumed a larger proportion of importance in each subsequent meeting and we therefore decided to try to more or less summarize some of the ideas of others, adding to these the concepts of sixty-nine panel contributors as well as the opinion of the members of the Committee. What is about to be said has probably all been said often and better at some other time.

"Out of the old fieldes cometh al this new corne fro yere to yere."—Bartlett's Familiar Quotations, Preface to the Ninth Edition.

Senescence

Senescence is used usually to indicate the so-called normal changes associated with aging. These normal changes are often a puzzle. Frequently these changes actually represent chronic disease which is asymptomatic and because it is asymptomatic is termed the effects of aging. There is sometimes quite a difference between being classed as having chronic disease and being actually ill. How many of these changes associated with senescence are actually due to other factors is still a problem to be decided. The most popular concepts of aging, its characteristics, and its length are found in the following two quotations. "The days of our years are three score years and ten; and if by reason of strength they be four score years, yet is there strength, labor, and sorrow; for it is soon cut off, and we fly away." Tenth Verse of the Ninetieth Psalm. And from Shakespear's "As You Like It," Act II—

"All the world's a stage,
And all the men and women merely players.
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages.
At first the infant,
Mewling and puking in the nurse's arms.
And then the whining schoolboy, with his sachel
And shining morning face, creeping like a snail
Unwilling to school. And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow. Then a soldier,
Full of strange oaths, and bearded like the pard;
Jealous in honor, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth. And then the justice,
In fair round belly with good capon lined,
With eyes severe and beard of normal cut,
Full of wise saws and modern instances;
And so he plays his part. The sixth age shifts
Into the lean and slippered pantaloon,
With spectacles on nose and pouch on side;
His youthful hose, well saved, a world too wide
For his shrunk shank; and his big manly voice,
Turning again toward childish treble, pipes,
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything."

Time

Aging in the realm of man is the effect or change on the individual wrought by time. Each stroke of man's own invention, the clock, must be associated with some meaningful change in the organism. To prove this seems to be a most difficult if not impossible problem. Even in the laboratory animal this problem is far from simple. It is true that most every factor in an animal's life can be fairly well regulated and stabilized. Changes that thus occur in time can be said to be associated with that passage of time. Much of these measured changes however, may be due to the fact that the animal is incarcerated in the cage, or that there may be personality differences between him and the cage tender. In any case, removing all the psychosomatic, physical, psychic, bacterial, and viral causes for change we come up with the sum total effects caused by aging. If time produces no effects then removal of the above causes should produce a situation wherein immortality results. It is very well agreed as proven by Carrel's growing bit of chick embryo that if all environmental factors of change are controlled the one-celled animal is immortal. This does not mean that the one cell continues to live on unchanged through aeons of time but that its likeness is perpetuated in subsequent daughter cells without leaving behind a corpse. This mortality in the more complex individual is affected either by the very complexity of the individual or by time itself. (FCS)

Aging

In the complex organism aging is associated with a balance between the kinetic forces of construction and destruction so that the function for which the individual is designed may be accomplished. This constitutes an accentuation of constructive forces until certain material objects have been accomplished and then a gradual shift of emphasis to the destructive side with probably more emphasis on the non-material aspect of man's nature. (FCS) Stieglitz refers to this process as evolution and involution. He further says, "Aging begins with conception and terminates with death. . . . Aging involves two simul-

taneous processes which operate continuously in spite of the fact that they are contradictory to one another. On the one hand growth or evolution occurs, on the other atrophy (which means shrinkage) or involution. These processes, continue throughout life, though at varying rates. We can observe illustrations of atrophy even before the infant is born in the disappearance of the gill clefts which first develop and then atrophy in the early mammalian embryo. At the time of birth when the child begins to breathe and get its oxygen from the lungs instead of from the mother's circulation the atrophy of certain arterial structures is indistinguishable under the microscope from the involutionary changes which we see late in life. The atrophic process is the same in the newborn infant and in the senile grandparent. A very interesting phenomenon occurs in the placenta or afterbirth. It becomes atrophic or 'old' when its functional life is near termination. At nine months of pregnancy, there exists an intimate proximity and interdependence in a very young baby, a middle aged mother, and a senile placenta. Biologically adjacent and functioning together are three widely divergent biologic ages. Here is an area of study which has by no means been explored adequately."

In one sense only can aging be retarded or accelerated. This probably only for a short period of time as when the total metabolism is slowed or hastened by cold or heat. This type of change could probably only be purchased at the cost of trauma to the individual and would add no noticeable increment to longevity. (FCS)

Immortality

The one-celled animal in a proper culture media may be said to possess immortality in that the involutionary process of aging is not evident, so long as all environmental factors are controlled, but in the light of our concept above they must definitely age. That is change in some way between the time of one division and the next. Although the proof may be impossible to attain at the moment there must be some difference between the daughter cell of one second of age and the one of ten minutes of age just before the next division. This must be true since in a controlled environment division occurs as a function of time and a single cell of a certain species will have daughter cells only after the passage of so much time. The measure of this change in a unit of time is probably the purest estimation of the effect of time on protoplasm. (FCS)

This type of immortality is almost entirely outside the realm of control or direction by the organism. Protection for the individual cell from its environment including its own waste products and continuity of the race rests on the weak reed of environmental stability. Realizing these defects evolution proceeds in the direction of exercising more and more control over these environmental factors. The age of specialization was begun. Groups of cells were set aside to take care of irritability, growth, reproduction, respiration, temperature, et cetera, so as to regulate the complex individual's (or better the community of cells') environment. Thus potential but hazardous immortality of the individual cell was sacrificed for what seemed to be less immortality potential but a more certain definite life span. The proof that this was a wise choice lies in the fact that the most complex of all creatures has managed to become the dominant force in the universe, while the unstable, uncontrolled environment has kept the one-celled animals at their previous level. (FCS)

Logically it now follows that some definite change occurs in all organisms in time. This can hardly be retarded or accelerated when only time and protoplasm are the variables. By changing other variables such as the chemistry or temperature of the environment the rate of change produced by time can be altered but probably not to the advantage of the individual so far as longevity is concerned. (FCS)

Disease

Disease has been described as that state of being out of harmony with one's environment. Bacteria, viruses, and malignant growths may disturb the internal environment enough to cause disintegration of the individual. The internal environment, body chemistry, temperature, pulse, et cetera, operate within rather narrow limits and are only mildly influenced by age. Exposure to environmental stress, physical agents, et cetera, may operate through wider limits but produce their deleterious effects ending in diease just as surely and certainly as do the bacteria. It would seem then that the resulting picture of a disease process would be little affected by age as such except as this particular disease might be influenced by the preponderance of evolutionary or involutionary processes at work at the moment. Without evaluating all these factors it becomes hazardous to assume without re-examination, research, and study that old people tolerate certain changes and effects poorly. By now it will be evident that it is suggested that the effects wrought by time and time alone are the same from the start of life to its end and vary only as the protoplasmic substrate varies either as the results of the effects of previous time or stress. That most of the changes associated with so-called normal senescence are the results of the impact of environmental phenomena both internal and external to which the individual has made a partially satisfactory adjustment. A totally unsatisfactory adjustment results in death. To improve longevity then, one is not left with as few tools as seemed to be the case at first glance. We are beginning to understand some of the psychosomatic effects of stress on the individual's health and happiness. The

application of this understanding early in the life of the individual may well bring about better adjustment, better health, and a longer life. What to do to retard the deterioration associated with senescence produced a great deal of agreement between the "Mail Panel" members and the members of the Committee. (FCS)

Psychosomatics

J. Sheldon Turner of the Department of Health, Education ,and Welfare states:

"From experience in the public welfare field, it appears that the key to retardation of senescence and prevention or postponement of diseases associated with the aged lies in further exploration of the relationship between emotions and physical disorders, i.e., the relationship between physical and mental health.

"Already the field of medicine has identified tension as a causative or contributing factor to certain physical ailments and the field of psychiatry has established that physical complaints of various sorts may occur when some individuals are placed in a social situation with which they do not have the capacity to deal. In a sense these are conclusions about extremes. We still have very little knowledge about the relationship of feelings and physical well-being for people in general or about what actually goes on within the human body when worry, unhappiness, and more extreme forms of emotional deprivation occur.

"From our experience with large numbers of people with varying problems, we can reach at least a tentative conclusion that personal well-being is dependent upon some sort of equilibrium between the organic and emotional life of the individual. We can observe that many people of all ages when deprived of love or other social satisfactions develop a variety of physical disorders. We can observe also that worry about one's personal situation often seems to retard recovery from illness. It appears that as interests in the outside world are shut off for any reason and the attention of the individual is focused increasingly within himself, he seems to suffer loss in competence both as a person and at his job.

"While such observations give a welfare worker some insight into ways he can help the individual, we still have no clue to what it really is within the individual which establishes the significant relationship between feelings and physical functions. Until we have greater knowledge of this relationship and therefore the ability to use it more consciously in the behalf of people, attempts at both preventive and curative measures in this field of human life will be limited.

"It is an area of concern which affects people of all ages and it seems safe to assume that preventive measures in early life will reduce many of the problems which are now thought to be characteristic of the aging process. The person brings to old age the satisfaction and disappointments which he has collected along the years. Perhaps the only uniqueness of old age is the attitude of our culture about aging, the gradual loss through death of close friends and relatives, and the wearing out process of the body, which at least at this stage of our knowledge, appears to be an accompaniment of advancing years."

One wonders how much of a geriatric problem there would be if the attitude of the family, relatives, the community, and industry and government could be the same on the sixty-fifth birthday as it is on the thirty-fifth birthday.

The Authority

In a similar vein, Howard Wheeler says:

"However, I feel free to say that both observations of and experience with life in the later years (I am in my seventy-third) have just about persuaded me that the ups and downs in the curve of health would be found to parallel closely those in the curve of morale, if the latter could be graphed.

"In other words, I have come to think that in the search for the key of our 'aging problem' the terrain of exploration in medical therapeutics and prophylaxis might be extended with profit to include the area of attitudes: attitudes of older people as regards both the community and themselves, as well as attitudes of the community as regards its older members. For, if and when the American genius for invention comes up with a way by which our society will be brought to think of its senescent segment as integral with and important to the welfare of the whole, then, I think, many of the gerontological problems which we are now identifying, analyzing and endeavoring to crack will dissolve of themselves. This may be a long and almost imperceptible evolutionary process. It could be, though, in the nature of an awakening. In any event, as an experienced senescent, I can see much to be gained and nothing to lose if medical science elects to turn a speculative eye in this direction.

"The present and pressing need, as I see it, is for recognition of, encouragement and development of, and, above all, use of the contributive potentials of the older members of the national family, with monetary return truly representative of the nature and value of contribution, calendar age notwithstanding. If American ingenuity could bring this about, one would not be far out on a limb, I think, in predicting that 'the declining years' would become largely a myth of the past, with maintenance of good health seen to be closely connected with maintenance of high morale. However, this may be, surely it is clear enough already that segregation of and unjust discrimination against our older people as they try to carry on in a standard of living to which they have become accustomed will not work towards the solution of the problem of our aging population.

"You of the medical profession, I am sure, will give the nod to this one lay observation: A health impairment in senescence, or, for the matter of that, in any other period of life, may have a cause not readily discernible in the effect. I could present clear evidence out of my own rcent experience, for example, that destructive emotional state can be the cause of illness.

"In the field of psychosomatics I am, to be sure, close to being a complete know-nothing. But even so I take this opportunity to suggest that the family physician, and the specialist and medical consultant as well, are in a uniquely favorable position to impart that which makes for improved morale and so far improvement in physical tone. This I further suggest is particularly true of medical service to lonely and discouraged older people."

Needs and Motivation

Irene Beland feels:

"In the prevention of disease and postponement of senescence one of my observations has been that by and large the elderly person who is needed and feels that he is needed in the family situation or group and who continues to carry responsibilities commensurate with his abilities and condition seems to have a happier and healthier senescence than those who do not have responsibility for themselves and for others."

Along the same line Nila Covalt says:

"My work has not been directed at the postponement of senescence, but rather at the physical rehabilitation of individuals regardless of age . . .

"1. Motivation and the desire to remain alert appears to be one of the prerequisites for the delay of senescence.

"2. If a patient has a chronic illness or disability superimposed upon his aging processes the individual's own fears in regard to the illness, or the fears of his family, and the secondary gains to be obtained from dependency, are basic opponents to motivation.

"3. We might further postulate:
(a) Frustration abets senescence.
(b) Rejection by society (one's peers) leads to senescence.

"4. It is my opinion also, and this is not substantiated to my knowledge, that the social climate in which older people may find themselves hastens the process of senescence. Such things as inadequate income, substandard housing, lack of recreational facilities, and the inability for a variety of reasons to be a contributing member of society are concomitant factors of the process known as senescence

"It has been our experience in teaching Activities of Daily Living in our physical medicine and rehabilitation department, that motivation and willingness to be physically rehabilitated are not related specifically to the age of the individual. Rough estimates have shown us that a patient with either mild or severe physical disability may as often accept full training and carry out all the prescribed treatment in physical medicine and rehabiliation when they are sixty-five and older than the patient in the age group from twenty to forty."

Ruth Hubbard believes:

"A graduated reduction of load is probably indicated for most people, certainly on the physical side. But the period at which this should begin is highly variable as you have indicated. I believe just as strongly that the continuing of some responsibilities and the maintenance of active interest contribute largely to the postponement of senescence."

Still largely in the field of psychosomatics, Ollie Randall says:

"There are three or four phases of living which to me are basic to anything which might be called 'preventive geriatrics.' They are not necessarily medical phases of living, but I am sure that we have long since come to an understanding that physical, emotional and social well-being are well nigh indivisible and indistinguishable.

"To me the best measure for helping to grow to adulthood and old age in a physically and mentally healthy manner is to have within the family unit the resources which are conducive to the support of the individual's personal security and development as a human being and a citizen. We assume far too often that the mere existence of the family, which is our single most important social unit, is sufficient to guarantee the total support that each individual member needs. We are of course witnessing a social revolution of such proportions that many of the families today which should have the responsibility for maintaining relationships which strengthen the individual and which assume that responsibility, are not capable of carrying it. But only through a strenthening of the family through better social and economic opportunities, through family life, education, including health education, can we hope to have what you are pleased to call 'preventive geriatrics.'

"In the broadly extended acceptance of pediatrics we are of course finding a beginning of the kind of health measures which we must have. Our failure to stress the need to carry out the intensive health care of infancy and early childhood for ourselves and for others, as we grow into adudthood and middle age, is the primary failure either in an individual or a community approach to preparation for a vigorous old age.

"Along with this it is my further conviction that life should be more favorably balanced throughout its span in relation to work and play. It is difficult to learn to play and relax after a life which has been devoted primarily to work. Fortunately, our industrial revolution is making time for play available to almost everyone, but as yet we are novices in learning to use that time profitably. The great amounts of money spent in the United States for spectator sports and passive enterainment indicate the lack of earlier training and appreciation of activities which through participation by the individual then become creative as well as recreational for him. A continuum of experience in balanced living is in itself the best preparation for later adulthood and old age, which should then come along naturally without the sharp break and personal suffering now common to so many people. Barring this unself-conscious preparation, certainly by middle age one should begin to realize one's major social needs as a human being and consciously prepare for meeting them.

"Nor can it be forgotten that there is a direct relationship between financial sufficiency and satisfaction in the less material aspects of life. Therefore it is probably useless to think of 'preventive geriatrics' without some attention being given to building economic resources which will provide for adequate living, including adequate and proper nutrition. Poor nutritional habits, as I have watched many older people I have come to know, seem to account for many of the health and personality problems which crop up in later life. Attention to these on a knowledgable basis is as essential in the middle and later years as it is in the earlier years.

"With companionship and sociability so vital to every human being, it seems important for people to be aware of this and to exercise some initiative in keeping ties with other people strong enough to prevent loneliness from becoming the destructive factor it so frequently is. Such loneliness, often mistaken for rejection, is one of the main reasons for so much of the illness and unhappiness of old people I have known.

"A diversity of cultural pursuits and interests seem to me be a 'must.' One can count so little upon retaining all one's faculties throughout life that one's inner and outer resources should be culturally satisfying and various enough to permit adaptation to the failure or the loss of one or more of these during old age."

The problem of providing economic security for life through the medium of the Saturday night pay check raises many issues so picturesquely stated by Dorothy Anne Miller:

"You can't work in industry very long without getting drawn into the big question of what's to be done about older persons. Letters stream over your desk from retired workingmen. And from worried or angry wives of men about to be retired. And from people who'll be retired in a few years and don't cotton to the idea. Some folks drop in to chat. Or waylay you in the plant. Or on the street. You get flooded with questions. And besides those they ask, you learn to read behind their talk other questions they don't mention.

"If publiciy is your job, you get to a point where you have to think about tackling the matter of aging which is so important to all these folks and your company, too. You set out to look for answers to their questions. But who's got answers? You put a few questions on your own hook to people you think might have them.

But what do you get? Platitudes, easy opinions, generalities. You look for books. But there are mountains of controversial reading to do before you're equipped to start batting out really punchy paragraphs. And in the meantime, there's F. K., bitter and forcibly retired at seventy-nine, his heart fettered to . . . and his engineering wizardry still making him better than a dozen of the younger fry. There's big J. D. in the engine plant, a modern-day Samson, whose great trouble is the wrong birthday coming up this year. And there's J. G., once a professional ball player, who says: 'Man, I am just what the Tigers need and they tell me I can't even be a sweeper any longer.'

"You take a picture of a group of retiring longservicemen and you don't need to ask for stories of their lives because everything that's important shows right in the photograph. Strong healthy men and shrunken timid ones, happy whistlers and whiny hypochondriacs, precision experts and perpetual fumblers, religious souls and the odd lewd old sinner—and you are a little horrified that so many working under your same roof for the same length of time should reach this point so incapacitated for the years that are left them. Indusry is awfully tough on people.

"Somebody says to you—'You've got a paper. Write something.' What? Nobody knows exactly. Something nice and interesting and inspiring and stimulating and factual and elevating and that will remind people of things they already know and tell some they don't. You can pick up the information. Don't make it too high-toned and don't use words of more than three syllables. Keep it light and make it a little funny. But give 'em the works, sister. Writing is grammar and spelling and putting a paper in the typewriter. (Like a nickel in the slot machine.) Who takes count of what has to be behind it—the knowledge and charting and selling and the words that are only railroad tracks for the facts?

"You have to start with the facts. So where does that bring you? Right straight to the original questions. You can't get away from answering them. You can't gloss prettily or learnedly around this aging subject—not for industrial readers. You can outshakespeare it without getting a single real reader, no matter how many people's pictures you publish or how many readers' names you manage to work into your space. You have to talk turkey. In plain American.

"And the one plain fact that you have to remember without ever touching is that despite all the whoopdedoo about the progress and humanization of industry, the people in it will always have to adapt themselves. They are the expendables."

Aging and Idleness

In this field of "retarded senescence," A. J. Carlson has the following to say:

"Nor do we know the nature of the factors that invariably induce gradual aging, apart from disease, preventive overstrain, and accidents. The addition of years to life and more life to the later years of man today is largely due to the discoveries and the applications of modern medicine.

"The physiologic age of the worker is not synonymous with his chronologic age, owing to the individual variables in heredity, mode of living, accidents and results of disease.

"While most workers past fifty or sixty years of age have somewhat less physical strength and physical endurance as well as some impairment of hearing and vision, this may be compensated in many forms of labor by greater skill and experience and the decrease in youthful dissipations.

"By keeping in idleness older workers who can still perform useful labor we are not only wasting valuable human resources, but we are contributing to biologic parasitism and degeneration of human society. For man is no exception to the biologic law that existence without effort, without struggle, impairs the species.

"By forced idleness of the increasing army of older workers in our midst we are forging a dangerously weak link in that large fraction of society whose experience, wisdom and relative unselfishness could guide those with less experience and wisdom. For when a person is shunted out of the dynamic current of life, courage and incentive are at low tide.

"There is also evidence that too little physical and mental activity, i.e. work, speeds up physical and mental deterioration. We do not yet know why, but we can prove that a denervated skeletal muscle does not live long. Hence: work, work, work from your diaper days until death, appears to be sound biological medicine."

Harwood S. Belding submits the following ideas, but does not believe they are "fully substantiated" at the present time:

"We propose that aging is characterized by decreasing ability to meet and compensate for life stresses, both those imposed by the environment and by work. This reduction of the powers of homeostasis, by which the organism maintains its integrity and freedom, is seemingly the primary manifestation of aging. Some description of age losses in bodily powers of adaptation is available, but the story is by no means complete.

"We postulate that exercise of physical and intellectual powers, within each individual's personal capacity, prolongs usefulness and maintains ability to adapt to life's stresses. Conversely, habitual 'conservation' of bodily powers, by avoidance of contact with work and environmental stresses, favors premature loss of the very capacities that are being 'conserved.' The evidence in support of this postulate is incomplete. Furthermore, it is entirely possible that some types of stress and activity have no long-term effects on health, and may therefore be accepted or rejected at will.

"This postulate partly follows from the first and second ones. It is that decreased willingness to face new activities and new situations is a conspicuous characteristic of aging. It seems likely that this fixation of the individual in established patterns can be postponed by selective acceptance of opportunities for new experiences."

Health and Aging

Dr. Belding further says:

"Incidentally, I question the statement in the first part of the paragraph three of The Letter (sent by the Committee to panel members); '. . . since our older group now represents more physical and intellectual vigor than a similar group of fifty years ago. . . .' It may be that the sum total of physical and intellectual vigor is greater only because more people are present in the group. I question whether we have definite evidence that the state of health and competence is higher now than it was fifty yars ago. It seems to me this points up the need for research on well, elderly people, better to understand their capacities and limitations."

Along the same line A. J. Carlson in commenting on our aging population has the following to say:

"I think this is assured by more of science and the better art in medicine, fifty years hence about fifteen out of every 100 people will be over sixty-five years old. I think we can add that this army of older people fifty years hence will be even better qualified for useful work than are the people of the same age today. Thanks to

more science and better art in today's medicine our larger 'aged army' of 1940 is less decrepit than was our smaller army of sixty-five years old 100 years ago." (This was written in May, 1943.)

Ernest T. Boas answers the question propounded by the geriatric letter as follows:

"The questions that you propound are not simple to answer in a few words. We do not know the cause of aging. We know that every species of plant and animal has its own particular life span which appears to be part of the inborn biological equipment of the organism. Furthermore we know that in man longevity appears to be a familial trait, that the members of some families tend to be long-lived, and others short-lived. This suggests that the development of senescence depends on certain genes that control the chemical and metabolic activities of the body. So far we have not learned to recognize, far less to control, these obscure life processes. Research in this field involves basic biological and chemical disciplines. Such studies are steadily increasing and should be supported and encouraged.

Doctors Attention

"In the meantime, we as physicians have the task not alone to preserve and extend life, but to maintain the individual's health during the years that have been added to his life by the advances of medical science and of social organization. The chief bar to progress in the maintenance of the health of the aged has been the fact that physicians and laymen alike still confuse normal aging with the manifestations of disease in the aged. This leads to the assumption that invalidity and disability in older persons are the inevitable, irreversible result of senescence, and that, therefore, nothing can be done for the ailing person. So he is told that he must grin and bear it, and little attempt is made at medical treatment.

"These assumptions are contrary to fact. Few if any persons die of old age alone. Repeated autopsy studies of old people have demonstrated that they die of disease, and that these diseases in the order of their importance are: arteriosclerosis of the coronary, cerebral or peripheral arteries, hypertension, cancer, prostatic hypertrophy, tuberculosis and accidents. These are the same diseases that are the chief causes of illness in middle life. When they occur in elderly persons they merit the same intensive treatment that they receive at younger ages.

"Until very recently arteriosclerosis has been the symbol of aging. Today we are beginning to envisage arteriosclerosis as a disorder of metabolism, closely connected with disturbances of lipid function. and there is justification for the hope that we shall learn how to prevent and treat this major scourge of civilized man, and so it will be with cancer and other diseases of later life. The aging process as such does not give rise to signs and symptoms of disease. It is characterized by a loss in the functional reserve power of several organs of the body and of the complex hormonal, nervous and chemical integrative processes that maintain the homeostatic mechanism of the body.

"We must learn to recognize every deviation from health of the aging person as a challenge to diagnosis and to treatment, and dismiss the idea that it is but evidence of inevitable decrepitude. And when there has been crippling and disability we must employ every resource of rehabilitation of the damaged body. We must cease regarding the chronic diseases of later life as 'degenerative' diseases, for this incorrect assumption leads to the same apathetic and negative attitude that follows when disability and aging are made synonymous.

"An identical approach should be made to the mental disturbances that are encountered among older persons. It is assumed far too readily that mental and emotional changes among the aged are the result of organic deterioration of the brain, and the diagnosis of senile psychosis and senile dementia, are made without adequate foundation. The brains and minds of elderly persons lack the elasticity of response and the reserve powers that they had in youth, so that when an aging person is placed under stress, whether it be social and economic, or whether as the result of infection, heart failure, or malnutrition, orderly function of the cerebral mechanisms may be temporarily disturbed. But prompt and proper treatment of the underlying cause often restores normal function.

"Comprehensive annual physical examinations, geared to detect the earliest signs of disease, and the provision of adequate facilities for the prompt treatment of any disorders that may be discovered are an essential part of a program to preserve the health of older persons.

"Medical treatment alone is not sufficient to maintain the health of aging persons. Society as a whole must do its part to enable its seniors to continue lives of usefulness and of economic independence. All who are physically and mentally competent should have the opportunity to work and to maintain their places as responsible members of society."

Preventive Medicine

The MSMS Geriatric Committee letter brought the following reply from Edward A. Piszczek:

"Being interesting in the field of preventive medicine and public health I know that the future looks brighter for the population because of the advance in preventive medicine. The absolute control of diphtheria will eliminate many chronic hearts in the future. The control of whooping cough will eliminate much bronchial disease including bronchiectasis. The effective treatment of scarlet fever by antibiotics and chemotherapy agents will definitely reduce scarlet fever, otitis media, nephritis, and to a degree scarlet rheumatic fever. However, the broader aspect of old age intrigues me a great deal.

Modulation

"Since 1950 census figures show that Chicago has an all time high of 1,143,000 persons in the 45 and over age group (an increase of 177,000 in the past ten years) and this group constitutes nearly ⅓ of the city's population and since inflation has meant that many of the pension and retirement plans which seemed adequate ten years ago are now totally out-dated and since the older age group is now on the whole more literate and vigorous than a few years ago, it seems like a very good idea to study means of extending the living years of the individual as well as his existing years. Since this is a program which should begin in middle age, a new term should be found and popularized which would embody the concept of preventive geriatrics. Rehabilitation represents only a small part of such a larger program as is becoming necessary.

"For instance, a modulation program could be instituted in industries and occupations where a subtle shifting of man's work in keeping with his altering physical powers is indicated. It would seem that retirement and pre-retirement plans are to become outmoded because of the following factors:

"1. The economic factors which make retirement a hazard rather than an opportunity and make it impossible for a person to work and at the same time do not make it possible for him to do the things he has long dreamed of doing on retirement.

"2. Extended physical activity which makes it unnecessary and unsound from every aspect for us to encourage and enforce unproductiveness.

"3. Medical advances and the idea of 'learning to live with one's handicaps' are making it possible to save many persons with minor heart ailments, etc., from the scrap heap to the advantage of both the individual and society.

"4. The population shift which is the result of the lengthening span of life and means an increasing number of non-productive and idle elderly people to be supported by a decreased number of younger people.

"5. Postponement of senescence seems most obvious in individuals who have the most vital interest in their work and a feeling of being needed for instance, many doctors, nurses, both trained and practical, landscape gardeners, potters, and many other craftsmen, artists, etc.

"6. Newer concepts are admitting the values of experience and mature judgment and making it possible to use older persons for consultation and training of newer workers.

"The whole problem of what to do with the aging population seems to be tied up with the matter of job placement. It is becoming increasingly difficult to get workers to do certain types of routine work. Machines have taken much of the skill and initiative out of many kinds of work. Much of this work is not difficult but because younger people have education and drive they are eager for more challenging jobs and it is hard to find people to do these less demanding, less glamorous jobs. On the other hand, older people who cannot stand the strain of competition and high pressures, would be much more patient and consistent in their performance.

"Older people who are physically able to produce at all would seem to fall into two large groups. Those whose experience and initiative might fit them for consultative, teaching and other passive pursuits; those who by nature and experience would prefer routine work which is less strenuous, less demanding, and less hazardous, than they have done in their prime.

"This shifting of men from one type of work to another is what I would call modulation. It should be based on periodic physical examinations and phychological tests rather than a rigid age line.

Preparation

"Periodic examinations are being instituted in many businesses and in industries, but this procedure has not been used to the fullest advantage. A program of education should be instituted to prepare older people for the inevitable shift in their physical and economic status. What is faced is not feared. Many who have faced the prospect of added years of old age have done so with apprehension saying that they had no desire to live longer 'and be a burden.' An employment program geared to the medical program could accomplish this changeover of persons who reach a point where they cannot continue at their old pace . . . with or without a pension. Regardless of pensions it seems that remaining years of these persons' lives should be productive first because life will continue to be meaningful and satisfying and second because for their health's sake they need a regular pattern of living, getting up in the morning at a regular time, having meals on a schedule and preferably in the company of other people, becoming reasonably tired so that they enjoy rest and idleness when they have it; and third, because it continues their feeling of self respect and independence. Many of the problems of nutrition, personal hygiene and disease are due to the tendency of older people to withdraw or to be put by themselves where they eat alone, feel no need to keep up their appearance, or take an interest in physical well-being.

"They should be taught that they are not 'stepping down' in disgrace and being pushed aside, but are being transferred to another area in which they can live with their handicap (lessened physical powers) with dignity and with realism."

Prevention

Harry Becker believes:

"We must find ways to bring preventive health services to the older population groups, to forestall, to the fullest possible extent, chronic disease which might be arrested or cured. One method might be to develop procedures for objective periodic medical examinations of the employed persons, on the job, in much the same way that many cities have developed methods for examination of school and pre-school children. Through such a procedure, if it could be developed, we might learn whether certain illnesses could be detected early in the course of their development and the employed person could be referred to his physician for indicated treatment. If expensive and prolonged illness could thus be prevented, the service would be a constructive step.

Insurance

"The utilization of Blue Cross benefits, which is tending to push rates higher and higher, has become a problem of mutual concern to physicians, hospitals, employers, and unions. If on the job health education and health screening procedures could be developed on a practical basis it might eventually reduce incidence of use of hospital and therefore tend to lower Blue Cross rates. This approach might tend to increase the use of the family physician for preventive health services and for treatment early in the development of disease. This shift from emphasis on in-hospital care to maximizing the treatment of illness on an ambulatory basis would be desirable from an economic standpoint."

The Rehabilitation Role

The role of physical medicine in rehabilitation and preventive geriatrics, A. B. C. Knudson believes:

"In physical medicine and rehabilitation it is feasible to make every older man and woman more capable, within physical and mental limitations, of being useful to themselves and to society. The important criteria may be enumerated in three categories:

"1. Health maintenance in order to present physical or mental deterioration.

"2. To increase as much as possible, physical stamina and resistance against disease.

"3. To increase self motivation and concentration upon interesting activities.

"The first of these must be accomplished through periodic health examinations and follow-up by the physician or clinic. The second factor is usually realized by strict adherence to a regimen of physical activity within the tolerance of the individual. Calisthenic exercises, reconditioning techniques, and development of specific capacities of the body or groups of muscles when indicated, will all contribute toward actual increases in the total resistance. The third criterion depends upon the mental attitude of the individual and the indicated modification of this attitude when necessary. If the older individual can be motivated through interesting activities, including hobbies, to maintain or increase mental alertness, concentration and aptitudes, a healthy mental situation will usually be effected.

"A very important item is that of nutrition and maintenance of the correct body weight for the person's age, height, and physical condition.

"Statistics show that chronic disease and severe disability increase in direct proportion to the age of the individual; along with this there naturally develops a feeling of frustration and futility on the part of the older patient. In this realm the application of physical medicine and rehabilitation principles and procedures for the prevention, diagnosis, treatment and rehabilitation of geriatric illness and disability has proven itself of inestimable value. This specialty may also be of considerable help in overcoming psychologic difficulties of the aging person.

"To summarize, it is believed that the basic needs in the field of preventive geriatrics can be made only with a dynamic regimen which considers the whole individual

and deals with him in a very humane and understanding manner. Certainly, along with other medical disciplines, the specialty of physical medicine and rehabilitation offers real promise in the prevention of disease and in the rehabilitation of the sick and disabled who come under the category of 'geriatric patients'."

Prevention

Hertha Kraus thought that the factors listed below would be conducive to the delay of the aging process:

"1. Removal of preventable elements of economic insecurity threatening adequate maintenance in the later years.

"2. Removal of preventable elements of emotional insecurity especially in the area of human relations and housing.

"3. Prevention of undesirable and drastic changes in occupation after 40.

"4. Prevention of undesirable or drastic changes in personal setting, tangible environment, during later maturity.

"5. Prevention of necessity of great strain in making personal adjustment to new situations involving considerable reorientation during later maturity (even if such adjustment and reorientation should be financially advantageous promotion.)

"6. Positive programs of developing skills, occupational and leisure time activities, as well as personal relationships which may be expected to remain unbroken despite advancing years and possibly declining powers."

Oscar J. Kaplan further substantiates ideas that have been advanced before when he says:

"My studies lead me to believe that exercise of mental and physical abilities help to preserve them, sometimes even in the face of somatic changes."

Robert J. Havighurst believes that good health and longevity are promoted best by:

"1. A moderate degree of mental activity; e.g., reading, participating in discussion groups, civic activity, hobbies, work.

"2. Friendly relations with a number of people—family members or community members.

"3. A gradual tapering down of physical and mental activity after age sixty.

"4. Substituting of new activities for old ones which must be dropped because of retirement from one's job, loss of husband or wife, et cetera."

Authority

Dr. Ellan C. Potter, eighty-two years young, practitioner of medicine, offers the following suggestions for the prevention of disease and postponement of senescence:

"The individual whose upbringing in the home has emphasized healthful living, good sportsmanship, community service, good citizenship, tolerance, industry and good money management, has a sound foundation on which to build a good life and to escape or defer senescence.

"Lacking such a fortunate birthright and upbringing, the individual enters adolescence (when personal responsibility for one's own well-being becomes a reality) with a heavy handicap.

"The Responsibility of Society. Recognizing that a vast number of young people have not had creative upbringing in the family home, society owes it to them and to itself that the programs of the common schools, high schools, and colleges should incorporate in the curriculum and in group activities the fundamentals enumerated in our first paragraph.

"Creative Community Services should be available such as group work, recreational and sports programs, golden age clubs and family service agencies, denominational as well as non-sectarian, and should be brought to the attention of the young, middle-aged and older persons as a means of maintaining the spirit of youth and promoting good basic physical, mental and emotional health which will delay senescence.

"If Good Health Maintenance is to be a reality, the individual, responsible as he is for his own health maintenance, should have access at his own expense, or through a group insurance plan (or other device) to a qualified physician or clinical group for periodic health evaluation and guidance as to diet and weight in relation to height and age, and to the special dangers inherent in overweight and other detectable handicaps and their prevention. It may also be necessary to supplement the ordinary dietary by vitamins under the physician's guidance.

"Community Activities. Every individual, regardless of age, has a contribution which he can make in his social setting. Such activity, whether within the orbit of the church, school, clubs, civic and political affairs, brings about vital inter-relationships if the individual gives of himself rather than expecting to 'receive' benefits therefrom. By just so much the outgoing personality retains the element of youth and senescence is restrained.

"Financial security is an important element in preventing anxiety and delaying senescence. In the State of New Jersey there are school districts co-operating with banking institutions in a 'School Saving Plan' which creates a sound relationship between earning, saving, and spending on the part of the child.

"Carried into the young adult years, and related to the purchase of annuities, a foundation can be laid for 'financial security' particularly helpful when supplemented by Social Security and Old Age and Survivors Insurance.

"Perhaps 'financial anxiety' after maturity is reached is one of the most potent elements in hastening the development of senescence.

"Solitary living may become a factor in accelerating the aging process and the development of senescence. Companionship with its give and take in daily affairs; the frank criticism of appearance, dress and manner, minimizes the development of senescence. Moreover, it is delightful to note that the youth of today is prepared to accept with pleasure and satisfaction the relationship with their aging elders as 'good scouts' whose life experience has made them valuable members of society and personal friends of the young."

The Plight of the Aging

Says Jess R. Ogden:

"We are glad that the Michigan State Medical Society has become interested in an approach which seems to us pretty important in any study of the problem of aging. It is very seldom that we pause to assess the impact of the community and its customs as upon the individual, although it is pretty easy to inventory effects after one stops to think about it.

"The plight of the aging in communities which are geared to creating an efficient setup for the young is an unfortunate one. For example, we all know that modern housing is not geared at all to the needs of older people, with its steep stairs, small apartments, etc., etc. But, going deeper than that, one discovers many conditions which have probably even more effect. There are the community mores—what pattern of behavior the community expects of its elder citizens: Is a widow expected to wear weeds? Is a retired preacher supposed to

keep on pontificating? Are certain things 'done' by older people? And are certain things taboo? All of these things are particularly ponderous in rural and suburban communities.

"I keep thinking about England, and its strange aversion to central heating—all of the cliches they used the while they became more and more rheumatic. It is in this realm of community mores and of enforced behavior patterns that rewarding studies could very well be made. I am quite sure industry refuses to hire older citizens because it is 'not the thing to do' rather than for any economic or technological reasons. I don't want to belabor the point, but it seems to me that some such considerations might very well go into the building of a 'logical framework' on which to base future study. The older I get and the more I see of the world, the more I respect the power of the community in its impact on the life of the individual."

Geriatric Clinics

Leon Banov states as his impression:

"A practical beginning to the study of the problems of aging should be the development of a series of geriatric clinics, operated upon the lines similar to our well baby clinics, where an aging person can meet a physician properly trained in geriatrics about four times a year. Such clinics could probably render a very useful service, because if properly conducted, considerable education can be given the patient by nurses or educators specially trained in the problems of the aging. Informative lectures and demonstrations to groups of geriatric patients could precede the periodic examinations by the physician.

"For the chronically ill patients—whose numbers are apparently increasing—an institution that would be midway bewteen a home and a hospital and that would cost the community less than a hospital, would be needed for those cases that require institutionalizing. A home visiting service in geriatrics should be provided for such cases as may be cared for in their home."

Leonard J. Goldwater, whose work has been confined entirely to studies relating to types of employment and occupation suitable for individuals having heart disease, incidentally including those of the older age group, says:

"In this connection, I have found that age per se usually constitutes a more serious handicap to finding employment than the existence of heart disease. Limited studies have revealed that among persons of all age groups, there is no evidence that continued employment has any adverse effect on the course of heart disease. If anything, it would appear that those who continue to work have a more favorable prognosis than those who stop working.

"This observation may be germane to the present interest in methods of postponing senescence. Available evidence strongly suggests that if the older worker is suitably placed and remains under proper medical supervision, he will continue to function as a useful individual for a longer period of time than would be the case if he were forced into a state of idleness."

Social and Health Factors

V. M. Hoge says:

"We are in agreement, of course, that there are two phases to the situation: One, that of aging per se; and two, the influence of the disease processes. At the present time it appears difficult to do more than postulate existence of biological, psychological, and personality deterioration having its origin in the genetic constitution.

"I believe there is some evidence from the field of endocrinology and biochemistry that it may be possible to retard certain aspects of the aging process. Watson and Caldwell at Washington University School of Medicine reported reinstatement of earlier functions following certain hormone injections. Adequate intake of protein, calcium and other essential food elements is probably responsible in part, for the improved health and energy status of older people today. Actually, of course, the only real evidence of that improved status we now have is that more people are alive at these ages. This suggests one area in which research is needed.

". . . . . There is increased realization of this relationship between social and health factors, and this is particularly important among aging people because of their circumstances of living. Continued activity is essential to the maintainence of physiological and mental functions. As age increases and conventional responsibilities of adulthood are finished there is a tendency to withdraw from all activities. There is considerable evidence that cessation of activity lies behind a good deal of premature biological and psychological deterioration.

"Personality changes noted in older people include irritability, moodiness, depression, submission to authority, paranoid tendencies, and infantilism. There has not been enough research to know how much to ascribe to organic changes and how much to environment.

"It is known, however, that social factors play a significant role. The needs of older people are basically the same as those of human beings at any age; for sense of usefulness, recognition, companionship, self-expression, social participation, self-management. Many older persons characteristically lose opportunity for satisfying these needs, with result found in the personality changes noted above as well as in physiological deterioration. It is probably true that some older people do not make an effort to maintain health because there appears to be no reason for doing so.

"The implication of these latter paragraphs is that we must find creative social situations and patterns of behavior that will convert the later years into a period of continued personality development, usefulness, and opportunity for self-expression.

Scott Lord Smith injects the following into the discussion:

"Acknowledging in the beginning the enormousness of the problem and likewise its enormous importance, I think we have to admit that we know of no way of really delaying senescence except in the early detection of incipient symptoms and signs. Most of these unfortunately apply all along the line of human existence. The demand therefore, necessitates a better application of our present knowledge to the problems of hygiene and common sense living to the avoidance of excessive eating, overexertion and mental strain.

"The second approach is the reorganization of society so that more aging members of it may continue in active production for a longer period.

"The third is more comfortable and pleasant care of those members of our society who have reached physical conditions necessitating retirement."

Walter T. Zimdahl opines:

"Retardation of deterioration in senescence in general cannot be accomplished by medical means alone. There must be a more vigorous advancement in the social sciences. There should be an extension of the retirement ages which will actually save management dollars, for it is more economical to retire a person at seventy than at sixty or sixty-five. There should be social emphasis on leisure time utilization and a recognition of senior citizens as a valuable part of society. Here at our Institute we are planning to study various problems of aged population, particularly concerning the cardiovascular-renal system. The area of nutrition is also a contem-

plated research program in the aged. We are also hoping to work with a program in conjunction with the State Psychiatric Hospital for prevention of mental diseases."

L. E. Burney writes for the postponement of senescence as follows:

"Senescence is a part of life itself and is not necessarily to be found only in aging people. In fact, the process of aging and the period of senescence cannot be defined in years alone. Though the process in aging is not completely understood, it should be given the utmost consideration which is possible with our present knowledge and that which may be added in the future. The concept that chronic disability is inevitable as age progresses must be corrected in the minds of both the physicians and the public in general.

". . . The responsibility of medicine to the aging originates with the actual teaching of medicine. The medical school has the responsibility of giving the medical student and the graduate physician the benefit of all the knowledge and experience available in respect to senescence, chronic illness, and chronic disability. The teachings in medicine must be shifted in emphasis from the acute remedial illness to those requiring prolonged and continuous medical guidance.

"The key to longer useful life is health; physical, mental, and spiritual. The family physician must enter into the mental problems of his patients as well as the physical. The rejuvenation of the few of which you speak in your letter who have found new mates no doubt has been due to the change in their social atmosphere which has created a new interest in life and has made them feel that they had a useful purpose. A physical examination or, better, a health consultation as frequently and as complete as necessary is fundamental to the prevention of chronic disability and might well lessen the deterioration due to senescence.

"An added duty of medicine today is that of rehabilitation. This should not be construed as rejuvenation but the restoration of independency for the individual to the maximum permitted by his current physical status."

Education and Clinics

Elizabeth M. Black trying to confine her suggestions to the practical issues involved, offers the following:

"Since many of the diseases in the aged seem to be psychosomatic in nature and stem from a realization on the part of the individual that he is no longer an important part of everyday living, and develops symptoms as an attention-getting device. It would seem that establishing an educational program in high schools and colleges geared to the 50-year-old and over, would be beneficial. Not many people past middle life have a desire to enter classes with the college age group. A few of these people have and proved that one is never too old to learn. Secondly, I would suggest establishing of multiphasic screening clinics for the apparently well individual. The average physician does not have the time to completely screen patients when they come to his office for a physical examination. Much of the laboratory work could be delegated to the non-professional group. The clinics could also help by employing the over 60-year-old person who has been retired. Such a program has been tried in one of our hospitals here. Several retired school teachers and others are being used for auxiliary help in hospitals and clinics.

"Many of the people become helpless and senile for no other reason than the fact that they have been treated like invalids instead of being taught to function to the full limit of their capabilities. I feel that the physicians should become more familiar with the facilities in their community which help in the process of rehabilitation. We find that many of the physicians are either ignorant of these facilities or underestimate their value, such as—Visiting Nurses service, Physical Therapists, and Rehabilitation Centers.

"The majority of our old age groups had no opportunity to plan for retirement. They had retirement thrust upon them without warning and we have all seen the result of this in people who have been full of vigor and zest for living. Upon their retirement they suddenly show signs of senescence. Much emphasis must be placed on housing where people can maintain a certain amount of independence in living. Many more people would be able to leave nursing homes if they had satisfactory living arrangements.

"Having observed the chronically ill aged in a welfare setting for the past five years, one cannot help but feel that a great deal of the senility could be prevented if the individual had been given an opportunity to maintain interest and be a part of a family group instead of being relegated to a nursing home where he loses interest in anything other than that is related to his own condition. Much of the crippling following chronic illnesses such as: Cerebrovascular Accidents; Arthritis; Cardiac, et cetera, is unnecessary. Chronic illness itself could be reduced to a minimum by establishing multiplastic clinics and a well-defined program of education.

"I cannot see much use of the drive to halt deterioration in the biologic processes unless there is a definite place in the world for the over 65 year group. I do not mean by that, The Golden Age Clubs which are flourishing all over the country but a definite place where the aged can make a contribution to the community. I have great hopes that in the next 20 years with the programs geared to successful living in the older years, that many of the problems we are now facing will be greatly minimized."

Medical and Nursing Care

Margaret Ranck states:

"More emphasis on hopeful outlook in medical care of the aged sick on the part of grass roots general medical practitioners—Institutes and Conferences in local medical societies. I am overwhelmed regularly at the fatalistic attitudes engendered in nurses by domiciliary or custodial attitudes of many physicians. Physicians seem to need more emphasis in refresher courses on reablement to self help rather than rehabilitation to paid employment.

"Promotion of and provision for community operated housekeeping and visiting nursing services in every community, in old person's own home to carry out the medical plan for the patient and to prevent the admission so far as possible of the oldster to institutions.

"In schools of nursing teaching better nursing care techniques with emphasis on prevention of development of deformities through broader knowledge of rehabilitative nursing for all nurses in all fields of professional nursing, also increasing understanding of the older patient as a person.

"Making broader opportunities available to practical nurses for improving their nursing competence.

"Supervision, regulation and education available to owners and superintendents of homes for the aged, commercial nursing homes, and boarding houses for oldsters.

"The development of community sponsored nursing and convalescent homes with a broad program in medical care, social and occupational interest—these to be located near to old persons, friends and home may or may not be directly connected to general hospital but should certainly have close referral and service relationship.

"I am pleased with the increased awareness of need for preventive medical care in well people in the middle

years of life to prevent or postpone chronic illness in old age."

For Instance

Kathleen Allen writes:

"On Saturday last week, on my way to Philadelphia, I met a woman doctor who at this point is 85 years old. She was on her way to address the annual meeting of a very important women's national organization. She was to speak on the past as it influences the future. This woman doctor has served as director of the welfare departments of two states and as president of a women's medical college in an interim before these welfare positions. After she retired from the second welfare department, she worked to raise funds for voluntary social agencies and she is still serving as a member of the Governor's Commissions on Chronic Disease and Old Age in her own state, as well as maintaining her interest in the American Public Welfare Association as a regular attendant of regional meetings in New York and elsewhere. She attributes her ability to continue this very full life to her personal good health and the fact that she has always been concerned with something that is bigger in its implications than her own emotional or physical problems.

"This is a success story that cannot be duplicated too often. It seems to me, however, that if the right mental hygiene is developed for young people in adolescence and through early adulthood, that there would be a good many more people who might achieve this seemingly triumphant old age. Too many people that one observes have not built up personal lives that are satisfactory to them as they grow older. Too often they have depended on children and other objects of their affection to furnish the satisfaction that they really have to find for themselves at any age. My thinking on this point is conditioned by an older woman who said to me recently, 'I have lots of time, but I have always been so needed until now.' This remark stemmed from her dissatisfaction that her son and daughter-in-law were not keeping her in their picture as much as she had always hoped. Neither was she sharing in the activities of her grandchildren to the desired amount. 'Not being needed' seems to be the let down point in a great many lives as they develop. Apparently too many people have no activities which might round out their lives in order to establish this satisfaction. As they grow older and become more inactive physically, their emotional needs are more evident to themselves and the frustrations often defeat the effective relationships which might still be possible for them with the various generations in their personal orbit. A good deal of attention is now focused on the need for developing hobbies that will take up the time during the period of old age. It doesn't seem to me, however, that hobbies are important enough to replace gradual development of understanding made possible through effective mental hygiene during the formative period of one's life.

"This is probably not a very profound observation but I have been impressed by this educational need over a great many years."

Nursing

Ruth D. Freeman comments:

"I am very interested in the project of the Geriatric Committee of the Michigan State Medical Society relative to the problem of retarding deterioration now associated with senescence; preventing or postponing diseases generally associated with aging. The following suggestions are made essentially from the standpoint of nursing supervision and many of them could be implemented within the structure of the present nursing programs:

"1. Emotional guidance during pregnancy and parenthood.

"2. Reconcile maternal responsibilities and interests with continuing life interests that might be expected to function after children have left the home. For example, I think more emphasis might be placed on having professional women who left their profession temporarily for childbearing keep sufficient contact with their work so they can return to it on a full or part-time basis after the children are grown. Such contacts may be maintained by volunteer work, functioning on committees, or special projects within their professional group or carrying part-time responsibilities that can be fitted into the over-all pattern of home and family care.

"3. Persistent emphasis on reducing fatigue and tension. Such instruction should be an incidental part of all nursing services and would be aimed at the development of habits of relaxation and optimum handling of difficult or frustrating experiences so that emotional integrity is maintained.

"4. Intensive guidance of patients and families when chronic illness appears, to bring about the least possible disruption in the individual's life and the family's response during the period of illness. In terminal cancer, for example, it is often possible by a program of family instruction and encouragement to prevent or cut down the time of actual bedfast status.

"5. Use of all possible instructional and motivational efforts to control obesity. This has profound psychological as well as physiological effects and contributes to social inactivity as well as enhanced danger of illness.

"6. Encouraging family social patterns that will maintain the independence and broad interest of older members of the family. Separate apartments within a house for grandparents which permit them to do their own entertaining and live their own lives with some independence while being somewhat sheltered by the presence of the family represents one example. Social activities directed toward the older age group as sponsored by such community groups as churches, fraternal organizations, et cetera, provide another interest broadening outlet.

"7. Encouragement of family health advisory services by private practitioners of medicine, supplemented as necessary by nursing supervision of the 'well' family. By having the whole family come in as a unit for examination, stimulus is given for more frequent checks on the adult which should provide for early diagnosis of diseases of later life and evidences of need for change in habits of living to build general vitality."

Elizabeth S. Bixler and Margaret Magee contribute:

"Some of the postulates which might come from the discipline of Nursing, regarding the postponement and prevention of disease associated with the aged:

"1. Promotion of individual and community interests and hobbies. Such activities should and could be sponsored by a group of representatives from a certain community.

"2. Formation of a commission, whose representatives would include all health and social agencies of a community. The scope of their work would include a survey of problems, formation of: preventive medicine geriatrics out-patient department where, in addition to medical care, nurses could be consulted on problems of hygiene, modification of daily living, etc.

"3. Out-patient nursing service or visiting nursing service on consultant basis, on problems of modifying environment so as to insure optimum utilization of efforts. Such a problem could simulate our well baby clinic setup and give appropriate services.

"4. Establishment of group activities for the aged at a community meeting place; utilization of group dynamics on such topic areas as health practices, health facilities, civic problems, hobbies, etc. Encouragement

of self government of group of oldsters with consultant service from professional workers.

(a.) Wide development of visual aid material such as movies and television facilities, utilization of radio for the promotion and publicity of the above enterprises, with a 'grass roots appeal' for organization.

(b.) Utilize all these studies and well-organized body of literature from the field of preventive medicine (already available).

(c.) The nurse would continue her role as teacher of good health precepts, enlarging her present clientele to include the senescent citizen who is at present in apparent good health.

"5. Inclusion of all above aspects in the cirriculum of schools of nursing."

General Considerations

Theda L. Waterman believes:

"1. The preparation for later years should start in middle life. This preparation to include:

(a.) Good medical evaluation and doctor's supervision. This to include dental care. There should be special attention to nutrition.

(b.) That individuals be encouraged to plan for their social adjustment. This to include keeping up interest in present activities and developing new interests and cultivation of hobbies; maintaining contacts with church groups, lodges, etc. and maintaining an active interest in community activities.

(c.) Planning for financial security for the later years. Developing of a program which would include pensions, social security, annuities, and such or perhaps a combination of all of them.

(d) Making plans for housing. The development of a program which will not necessitate their being dependent upon their children.

(e.) A program for emotional adjustment. This to include developing an attitude of acceptance of the limitations which come with the later years. The adjustments necessary because of changes in the family group, and if possible maintaining the ability to adjust to any necessary changes.

(f.) Religious or spiritual benefits. The importance of continuing their church contact which can be beneficial both socially and spiritually.

"2. Emphasizing the importance of community contacts and performance or the development of facilities which will make it possible for people to prepare themselves for later years."

Old Age—Health and Medicine

William B. Kountz contributes the following:

"The idea which you have of 'preventive geriatrics' is, I think, a most logical and practical point. My opinion concerning preventive geriatrics is quite hopeful and I believe that we can by careful study postpone the degenerative state that we know today as senescence.

"In the first place, the diseases we associate with aging must be distinguished from degenerative or exhaustive processes. I do not believe any one has ever died from old age but many have died from diseases accompanying old age such as heart disease, cancer, diabetes, etc. Just as youth is accompanied by its physiological deficiencies such as inadequate antibody protection due to lack of exposure and, to some extent protein deficiencies, and its consequent diseases such as scarlet fever, diphtheria, measles, etc., so the geriatric patient with his deficiencies or exhausted biological processes has primary diseases which develop. Also, just as pediatrics has brought to us an understanding of the body deficiencies of younger individuals, so we must understand that there are changes in the body of the person past midlife which bring about anatomical diseases and disabilities at a later period.

"It is necessary therefore, that medicine understand the biological changes and deficiencies and modify them at an early stage so that the killers heart disease, arterial disease and cancer will not take their toll, at least in their present form. It is my opinion that health may be promoted by adequate and proper study and understanding of the body changes that occur with age. It is my belief that the control of these factors is far more important than is the control of the other aspects such as psychological and economic problems because if an individual remains in good healh the other problems of old age do not seem so important. I can point to the experience of individuals whose health has remained good as being those who are adaptable to their environment, both economically and psychologically.

"Our research at the St. Louis City Infirmary Hospital has shown that maintenance of nutrition depends upon:

"1. Proper dietary intake with

(a.) protective measures to prevent exhaustion of body tissue and proper evaluation of such functions as gastro-intestinal tract and

(b.) administration of hydrochloric acid and gastro-intestinal enzymes if indicated and.

"2. Administration of the substance of the glands of internal secretion. Particular attention should be paid to the need for thyroid and sex hormones which are the earliest ones that tend to be exhausted in the body in most instances. In a later period attention must be paid to the function of the adrenal cortex and other glands."

Chronic Disease

Walter T. Zimdahl says:

"Chronic disease must be tackled with as much enthusiasm as is used in fighting acute diseases. The medical profession's contribution should be an increased interest and vigor in the field of geriatrics. Early detection of minor defects with proper care should be instituted. Diagnostic criteria should be implemented and changed so that earlier diagnoses can be made in elderly people. Control and treatment of degenerative diseases should be started earlier. We are in desperate need of many more geriatric centers."

Along the same line, L. E. Burney adds:

"Chronic illness or at least that disability associated with chronic illness can be kept to a minimum with concerted effort by all concerned. Those that cannot be actually prevented must be detected early and brought under competent medical supervision. In addition to the needed medical supervision, the physician must be willing to accept the assistance from the various health and social agencies which exist in his community. It is highly characteristic of the various chronic illnesses that they create problems over and above those of a purely therapeutic concern.

". . . . . In answer to the specific question, 'What would be the possibility of formulating a body of logical postulates from all the disciplines involved that would retard deterioration now associated with senescence and prevent or postpone the diseases generally associated with the aged group?' I would say that this is not only possible but is both advisable and necessary. Such postulates would be for the benefit of the medical profession and could be directed toward the profession itself, involving the training of medical students, and the responsibility of the practicing physician to the ever-increasing problem of chronic illness in our aging population.

"Lastly, I believe that the medical profession must take a more active part in the continued employment of the older person with or without physical disability. Chronological age alone can no longer be the criteria for employment. The feeling of usefulness, gainful employment if such is desired by the individual, is the best

preventive tool against premature senescence and the ills that accompany it. The medical profession has a large responsibility in establishing standards for physical fitness of the older worker. Management and labor alike must be convinced of the potential productivity of the older person whether it be on a part or full-time basis."

In this field of the chronic disease of the aged, V. M. Hoge has the following to say:

"The matter of diseases found among older persons is somewhat easier to discuss. The organism appears to be attacked by diseases resulting from its contact with its environment and by conditions that may prove to be either internal or external in origin. If it were possible to place human beings in a completely hospitable situation, the insult of disease, malnutrition, and accidents might be avoided altogether. This is manifestly impossible, but there is every reason to continue our efforts to attain the closest practicable approximation to it.

"The death rate in the older ages is declining in response to research on tuberculosis, influenza, and pneumonia. There is room for still further improvement and for a great deal in the case of accidents.

"Present knowledge of the long-term illnesses suggests that much can be accomplished that will have the effect of postponing infirmity and disability and, hence, maintaining good physical status over a longer portion of the life span. The major areas of promise are identified as follows:

(a.) Continued research on the etiology, nature, progress and methods of preventing or arresting the long-term conditions may be expected to yield good results.

(b.) Development of a new attitude toward the health of the aging persons, will also yield further positive results. Maintenance of the best possible health consistent with age can be achieved through periodic health assessments, health counseling and education, attention to diet, exercises, etc.

(c.) Careful diagnosis and early treatment will also postpone the onset of severe disability in many cases of conditions that have serious effects if neglected.

(d.) Many conditions, formerly regarded as hopeless, are known now to respond to treatment and to permit a greater degree of activity than we have been accustomed to think. Increased application of rehabilitation procedures may be expected to keep increasing numbers of aging people functional and reduce the need for custodial services."

Nutrition—Housing—Retirement

In my opinion, the next major contribution to longevity will be in the field of nutrition. I believe the present-day studies of enzymes and research in tissue metabolism are of prime importance in the effort to add "more useful life to years rather than just years to life." (Dr. Donaghue was first to use this expression in my hearing, and I credit it to her).

This idea is accentuated by Dr. L. Katz' demonstrations that atheromatosis, at least in chickens, follows local intimal trauma. The improvements in health and prolongation of life by the use of such hormones as insulin, adrenocorticotrophic hormone, thyroxin, and cortisone and such enzyme inhibitors as the sulfas, penicillin, Diamox® have but opened the door, I believe. They have been useful chiefly in correcting pathological internal environment and a large field in perpetuating normal internal environment and perhaps in improving situations now regarded as normal is about to be explored. (SCW)

From the Union Health Center, Leo Price writes:

"Many of the members of the International Ladies' Garment Workers Union in New York City have had the misfortune of subsisting for years on poor nutrition, in bad housing and subject in their jobs to the accelerated stress and strain of piece work produced under great tension.

"The garment industry is a seasonal one with periodic slack seasons during which the workers have a time of enforced rest. The stress of financial insecurity remains, but they obtain some physical release from the tensions caused by the piecework system prevalent in the industry. Our program has shown the great number of degenerative diseases which occur in the population and the ability of these people to work in spite of chronic illnesses, some of an unusually serious nature. In spite of the fact that many workers in this industry seem to give early evidence of senescence, they continue to work because of the need to support themselves and pay for the education of their children.

"A retirement program has been in effect for some sections of the industry since 1946 for members over sixty-five years old. Only a portion of the eligible population has applied for the retirement while the others at the same advanced age retained the will to work and continue on the job. They expressed the fear of being unable to live without work activities because they have very few other interests outside the struggle for existence.

"As of 1952 this section of the industry contained about 54,000 workers of whom 4,500 were over sixty-five years old. From these, 1,400 (31 per cent) applied for retirement benefits.

"When times are good and earning possibilities are high, many older age workers show a keen desire to carry on. When industrial conditions are not good, work intermittent and earnings low, a sense of the futility of trying to work seems to affect them and retirement applications mount.

"This institution also supervises a program of retirement for members totally and permanently disabled who are 60 years of age or older. This has been in effect since 1949. A total of 404 applications have been received (these are limited by the funds available to about 100 disabled workers to be retired in a year.) Approximately 75 per cent of the applicants for disability retirement are found totally and permanently disabled on the basis of very stringent criteria."

Public Health

Theodore C. Woolsey says that the division of public health methods have been increasingly concerned with the public health problems of older persons, and the division is currently engaged in a small scale trial survey of persons who have passed their forty-fifth birthday, to determine the attitudes toward employment of those not now in the labor force, and, particularly the extent to which their poor health, or beliefs about their own health, are deterrents to seeking employment.

"This study is being undertaken by the division at the request of a committee on the working capacities of older persons, of which I am a member. The committee has suggested in an interim report a series of studies in this area, some of which are not studies appropriate for the public health service to undertake. This particular study, however, seems within our subject matter field. Hence, the division agreed to carry

through at least a thorough field trial of an interview. We cannot say at present whether it will ever be carried beyond that point. However, we believe that because of the hypothesis frequently put forward in recent years that older people

(a.) Are needed as productive members of society, and

(b.) Will age less rapidly if permitted to be more useful, it is important to determine how strongly the older people are motivated toward gainful employment and the extent to which their health is a factor. . . . . .

"From the foregoing it is obvious that our orientation towards the problems of 'preventive geriatrics' is primarily that of fact findings for the use of others. One of the disciplines that must certainly be involved in projecting 'a logical framework on which to base future study' is that of the statistician. We feel that there is as yet a relatively small body of factual knowledge to which one can turn for good hypotheses. Hence, we should like to see an encouragement of careful fact-finding studies by any and all organizations that have the resources to conduct them. In our experience it is almost hopeless to depend upon data already collected for other purposes. Every once in a while one does have the good fortune to find a suitable data already at hand, but for the most part studies of chronic disease prevention and the postponement of senescence have to be planned ad hoc."

Research

Cecil G. Sheps points to the Seminar on Needed Research in Health Care which was held at the University of North Carolina in Chapel Hill, September, 1952, as a source of some pointed concepts relating to the subject at hand. The great increase in the life expectancy of man—has brought about a drastic change in the nature of the major health problems of the nation.

"In sharp contrast to the situation at the turn of the century, today, more than two-hirds of our deaths are caused by chronic illness and 60 per cent of all disability is due to chronic illness. Prevention (in relation to health problems) in many instances may prove to be dependent upon ability to alter or improve social or environmental factors. Such an extension of research would fuse the physio-chemical knowledge of man's structure and function in health and sickness with the knowledge obtained by the study of man in his social relationship, modes of life, and of the varied and complex factors now recognized as strongly influencing his physical and emotional health, his productivity, and his total well-being. It is presently recognized that human beings and communities vary greatly in their reactions and adjustments to environmental influences and in their ability to realize their health potentialities. Furthermore, social factors have an important bearing on the alteration of behavior and of attitudes which is intimately related to health. Therefore, research is needed to delineate the influence of such variable factors as family and group interactions in a community, modes of living and other social patterns on health, health practices, and health services."

In speaking of disorders of the heart and blood vessels, the concept is shown in the following statements:

"Heart diseases, however, are not merely a consequence of more years of life. . . . . "Fat men are more prone to heart disease than thin men, so diet is important, but being thin provides only a small measure of protection.

. . . "The study of these pre-disease characteristics of modes of life and individual physiology, followed through to the actual appearance of disease, cannot fail to yield invaluable clues as to causation and mechanics, as well as to provide empirical means of predicting and altering or even preventing the causes of heart disease.

"Although a great amount of significant laboratory and clinical research is now being done on the problem of cancer, a group of promising leads is being neglected. These leads stem from the fact that cancer occurs more frequently in certain groups of the population than in others. For example, cancer of the stomach affects men much more commonly than it does women; it strikes unskilled workers twice as commonly as persons in professional or managerial positions. Cancer of the lung—a disease which is increasing rapidly in the United States—occurs four times as frequently among men as among women; it occurs at a very high rate among persons exposed to certain chromate-ore operations or radioactive ores. Cancer of the cervix in women affects low income groups to a much greater extent than upper income groups.

"All these facts—and many more—suggest that cancer is associated with a variety of social conditions. Hygienic practices, occupation, nutrition and similar factors should be studied to determine their relationship to cancer of the various organs. Identification of these factors cannot be made in a test tube or under the microscope; they must first be studied in a community laboratory where observations of people exposed to certain social conditions can be carried on over a long period of time.

"Many diseases, including most of those which are now af greatest importance in terms of numbers of victims, have some kind of relationship to age. Age and the diseases which often appear in older people are not the same thing or a single complex. Age must be studied as an independent variable if the role of time and continued risk and exposure are to be understood in either a purely scientific or a purely practical sense. Research programs should be adjusted to this end and studies of the fundamental processes of aging itself, and their relation to disease development, need enlarged and long continuing support. Long term, multidisciplinary studies are needed to answer vital questions about the aging process—questions that range from the dynamics of cell structure and function to the problems of adaptability under different psycho-social circumstances."

General Factors

Berwyn F. Mattison's suggestions for the prevention of disease and postponement of senescence follow:

"1. More study in the relationship between diet, overweight, and the occurrence of heart disease and other degenerative diseases. We are at present initiating studies of overweight in the schools of Buffalo with the hope that we may be able to at least establish a baseline within our school population.

"2. Based on the results of such studies, continuing intensive community-wide health education aimed at the prevention of overweight (if that is indeed associated with degenerative diseases); and also emphasizing the increased need for medical check-ups amongst people who are overweight (with a special attention to detecting heart disease and diabetes).

"3. Recreation—through the adult education activities of the school departments to attempt to encourage development of productive hobbies during middle age so as to reduce the emotional impact of 'retirement' later on.

"4. Better regulation of and extension of the facilities in nursing homes for the elderly and chronically ill. They have recently been put under the supervision of the

County Health Department here and some progress has been made in improving nutrition, medical records, sanitation standards, and recreational facilities.

"5. We need to continue the barriers against syphilis, diphtheria, and other acute communicable diseases which did in the past contribute much to the problems of the chronically ill later in life.

"6. A more constructive approach to the problems of alcoholism, both from the point of view of primary prevention through education in the elementary and secondary schools and also through the provision of adequate clinic facilities with social work follow-up for the rehabilitation of chronic alcoholics.

"7. Encouragement of the systematic co-operation of the private practitioner of medicine. In carrying out 'health examinations' in his private practice; so as to provide periodic, complete medical check-ups for the aging adult who is not disturbed by distressing symptoms of any specific disease.

"8. Incorporation of screening techniques in the community services now being offered. An example of this would be the use of microblood glucose tests to detect possible diabetes, review of chest survey films for cancer and heart disease as well as tuberculosis, full utilization of blood pressure determinations and other simple techniques as widely as possible in clinics and all hospital admissions."

Nutrition

Nutrition in the aging individual becomes important both from the standpoint of the advancement of senescence and its relation to chronic disease.

Charles S. Davidson says:

"The Council on Foods and Nutrition has been deeply interested in nutritional problems in old individuals. I think it is fair to say that aging process is accompanied by many disturbances of nutrition, but that a great deal more work must be done before the facts become clear. There frequently seemed to be alterations in appetite, food intake, probably in digestion, absorption and utilization of nutrients. Which of these is of paramount importance and which can be altered by suitable therapy is as yet little known as far as I can find out."

Three postulates are offered by James M. Hundley which in his opinion have a firm basis in fact which can be expected to result in major benefits during senescence. These are:

"1. Prevention of obesity in the twenty to fifty age group, and weight reduction for those already obese. Such a program, if effective, might be expected to lengthen the life span as much as four years, and to result in major improvement in health and vigor.

"2. Increased attention to that segment of the geriatric population which subsists on grossly indaequate rations. These are highly individualized problems, but by using a variety of approaches, social, economic, psychological, and medical, much can be done.

"3. Increased attention to proper diet in those with chronic illnesses as a means of increasing vigor, sense of well-being and maximum resistance to disease.

. . . . . "In particular one would like answers to questions such as these:

"1. To what extent does the maintenance of maximum bone calcification from good diets in childhood and adulthood contribute to prevention of osteoporosis in the aged?

"2. Do maximum gains in height and weight during childhood necessarily mean a longer and healthier life?

"3. To what extent does adaptation to inferior diets during adulthood contribute to the ability to maintain health on seemingly grossly inadequate diets during senescence?

"4. Is our present national average diet of 11 per cent of calories from protein, 40 per cent from fat and 49 per cent from carbohydrates optimal for long and vigorous life and for the prevention of diseases such as diabetes, atherosclerosis, hypertension, et cetera?

"5. Does the maintenance of a high vitamin intake during adulthood have any influence on longevity or on vitamin requirements during senescence?

"6. To what extent do nutritional insults acquired during childhood or adulthood influence nutritional requirements or disease processes in senescence?"

Arthur H. Smith comments:

"In asking for 'suggestions for the prevention of disease and the postponement of senescence,' you have given me a difficult task because my chief interest is in nutritional biochemistry and this important factor in preventive medicine becomes operative a long time prior to the period commonly covered by the term 'senescence.' In the first place, years alone do not necessarily measure biologic aging; endogenous factors are such that some individuals appear almost youthful at an age where others show a detectable decline in physical vigor and activity. Of the exogenous factors influencing aging, I believe that nutrition is one of the most important. True, certain physiologic activities involved in nutrition do change with age; thus the secretion of digestive enzymes and of gastric acid decrease slowly, a lessened flow of bile may diminish the efficiency of the absorption of fats and fat soluble vitamins, a slower circulation prolongs the time of transport of nutrients from the gastro-intestinal tract to the body cells and decreases the deficiency of removal of the waste products of metabolism. Nevertheless, the principles of good nutrition which have been so extremely successful in their practical application in the field of pediatrics are essentially the same for the person in old age.

"One cardinal fact stands out, namely—that the aged malnourished patient is reaping the harvest of his yesteryears. The results of poor nutrition are more often than not insidious in their operation and so by the time old age has arrived, there may have been established functional and even structural lesions which are the consequence of poor dietary habits begun years ago. Another factor in poor nutritional state in older persons, has a psychological basis; remembering the food budget restrictions of their youth, the aged often plan a restricted dietary. Or, in many instances, finances may actually be limited in old age. Again, the mental and physical activity involved in the planning of adequate meals, often for one person only, may be more than seems justified by the apparent needs and the tea and toast type of meal becomes a routine.

"The other side of the picture is that of obesity in the aged. Inasmuch as this condition is most often due to excess consumption of food energy (calories) it would seem somewhat more readily controlled. The increased incidence of the degenerative diseases in this group and the rapid increase of mortality with overweight is well known.

"The principles of good nutrition have been more or less widely applied in this country for at least a third of a century; it may well be that the increase in life span of our population is, in part, a reflection of improved over-all nutrition. If this is true, it is not too much to expect, within another generation, a reduction in the diseases of old age and with it a postponement of senescence. Certainly aging need not be synonymous with degeneration."

Regarding the association of the chronic diseases in the same person and their association with overweight, Jean Downes says, "At the present time much attention

is being drawn to the problem of obesity in the population and its effects upon morbidity and mortality rates. According to Chapman, 'study after study has shown that the mortality rates among obese people are higher than among people of normal weight.' It is of definite interest therefore to learn what chronic conditions are significantly associated with overweight.

. . . "Among males the proportion classed as overweight increased markedly up to age fifty-four. After age fifty-five there was a slight decrease, the proportion varying from forty-two to forty-nine per cent thereafter compared with 55 per cent at the ages forty-five to fifty-four.

"Females were similar to the males in that the proportion of overweight persons increased markedly as age increased. However, from 65 to 80 per cent of the females at ages thirty-five to sixty-four were classed as overweight compared with only 49 to 55 per cent of the males at those ages. Moreover, females showed a much greater tendency to very excessive overweights than did the males; that is, 30 per cent or more above the standards used.

. . . "It is apparent from the data presented here that examination of the experience of a cross section of a sample population in the Eastern Health District of Baltimore confirms the impressions gained from the practice of clinical medicine. From their experience with patients, physicians have noted that patients with osterarthritis are usually overweight, gall-bladder disease is usually more common in obese persons, diabetes is associated with obesity, and that hypertensive vascular disease is frequently associated with obesity.

"Obesity may then be the predisposing factor which brings about the significant association of certain conditions in the same person. Heart disease and gall bladder disease may be cited as an example. Study of the overweight population brings out this fact most strikingly.

In summary, "Data presented in this report indicate that certain chronic conditions occur with greater frequency in the same person than would be expected if such conditions were distributed at random in the population.

"Those where the association of the two in the same person was found to be statistically significant are as follows: Heart disease and gall bladder disease, heart disease and diabetes, hypertensive vascular disease and arthritis, and psychoneurosis and gall bladder disease.

. . . "The chronic conditions found to be significantly associated with overweight, 10 per cent or more above the standard used are, heart disease, hypertensive vascular disease, arthritis, diabetes, and gall bladder disease.

"The study of the overweight population brought out the fact that obesity may be the predisposing factor which brings about the significant association of certain conditions in the same person."

Margaret A. Ohlson says:

"As you may know we have had a long time research project on the nutrition of women from ages sixteen through ninety. This project has been set up on the basis of a twenty-year plan with provisions of regular recontact of subjects. We are attempting to find out as much as possible about the food habits of a vigorous group of women and to relate these food practices with their general health and evidence of nutritional reserve over a period of time.

"There are a few findings which should be of interest in terms of the clinical management of older individuals and which should contribute to plans for further research in this field.

"1. Overeating with respect to calories is the most common nutrition defect which we have found in in older women of Michigan and adjacent states in the north central areas. Caloric overfeeding does not always mean that the individual's nutrition has been protected since there is marked tendency among many overweight individuals to eat a preponderance of carbohydrate food so that the total intake of specific nutrients would be quite low.

"2. We have tested the apparent requirement for protein, several minerals, and vitamins using accepted techniques. We find the capacities of the older individuals to utilize these nutrients is usually good, but that a few of them require intakes in excess of those suggested by the Foods and Nutrition Board for normal adults. A possible exception to this statement might be made in the recovery period of disability illnesses.

"It is quite obvious in comparisons of earlier work that the total calorie requirement of adults at all ages, with the possible exception of those individuals who are over seventy, is lower than it was fifty to seventy-five years ago due to the development of labor saving devices. We badly need direct experimental studies of the energy cost of work of women utilizing modern household equipment in order to verify and extend the findings of food intake.

. . . "We have been particularly concerned with the tendency of many individuals to take large amounts of vitamin preparations and ignore the diet completely. These preparations are never complete with respect to the specific food need of the individual and we are getting some evidence that they may place a tragic strain on the metabolic and excretory functions of some elderly people. There is nothing in our evidence to indicate that an older individual cannot be well fed with ordinary food if some choice is made in selection and preparation."

Blanche E. Lenning supports the contention of Dr. Ohlson and agrees with us:

"If something constructive is to be done to make the later years of life more worthwhile we must begin to work with the 'younger' older people."

"If we knew a little more about the nutritional needs of the individual patient, at what levels malnutrition and obesity have their beginnings and all the sequelae of the deficiency of a single food element, we might develop a lead on some of the so-called degenerative diseases usually associated with senescence.

"Among prisoners of war who have been on grossly inadequate diets some develop more serious deficiency diseases than others, some die and others survive. This is hard to explain. And what happens twenty years later? Will such malnourished individuals show a greater tendency to degenerative diseases than the average population?

"Will a decade of inadequate intake of a particular vitamin increase the frequency of other disease manifestations in later years? There is some evidence to indicate that lack of vitamin B6 or pyridoxine hydrochloride in the diet may result in impairment of normal growth, various degrees of stomatitis, various neurological disturbances ranging from anorexia through drowsiness to lethargy, faulty protein and lipid metabolism which may play a role in arteriosclerosis and impairment of the production of antibody protein which may increase vulnerability to infection." (CS)

Psychiatry

Psychiatry as it concerns the older individual is touched on by George S. Stevenson when he says:

"I am particularly intrigued with the fact that so many descriptions of senile dementia speak of the variability of confusion in the patient. Reference is made to the lucid intervals. I think we all recognize that if the confusion and defects of memory of these patients were due to destruction of brain cells we could not expect to find these lucid intervals. The evidence there-

fore, would seem to lead us to the conclusion that the defects are to an important degree functional, that is, for perhaps metabolic or other reasons the existing tissue is not able to function at its best, that variations in conditions allow it to function intermittently. This is something that needs careful research attention and perhaps experimentation so that the variations in conditions under which the patient lives, nutritional, social, et cetera, can be correlated with his mental state.

"I also feel that we should follow the lead provided in the fact that it is recent events for which memory tends to be lost first. According to this we should attempt to retain in the daily life of the patient those things which are more remote in his experience, familiar people, familiar furniture, etc. On theoretical grounds it should be expected that the confusion of the patient would be increased when he is removed from familiar things as he is when placed in a State Hospital."

Dr. Stevenson further quotes from his statement for The Hearing of the New York State Joint Legislative Committee on problems of aging as follows:

. . . "The problem before us as I see it, does not include those aged persons in the mental hospitals who are primarily long-standing cases of schizophrenia who have been in the hospital for many years. . . .

"We are concerned chiefly with the patients diagnosed as senile dementia and cerebral arteriosclerotic. . . .

"We next want to be clear as to what our concern is with these groups. Are we interested in them as sick people? Are we interested in all possible ways of ameliorating their condition? Or are we primarily interested in their cost to the public, their occupying beds in our mental hospitals, and the viewpoint that they are near the end of their careers and therefore not worth much and not worthy of serious investment.

. . . "I would assume that if an old person is mentally disturbed to a degree warranting treatment in a mental hospital that he has just as much right to that treatment as any other person whose mental disturbance is equally serious. . . ."

The seriousness of the problem to those affected is commented on further:

"Applying the first criterion to the senile and arteriosclerotic psychosis we find that these are most serious disorders, disorders that are ordinarily fatal. Life expectancy on the average being a matter of months after hospitalization. These disorders under the limitation of current knowledge, are chronic and they tend to be considered hopeless. This defeatist attitude has resulted in very limited research activity. The families tend to abandon these patients as hopeless, or if they are at home treat them with impatience. They are ready to shelf them, push them out of their lives. There is a tendency even for the states to shove them out of the usual mental hospitals into separate hospitals for senile patients. This is in effect abandonment by the state, since the recruitment of personnel for such institutions is most difficult. There is also a tendency to establish special buildings for senile patients in existing hospitals. This makes sense since buildings can be constructed which are more suitable to the limitations of these patients. If these were young people who had similar handicaps rather than old people, the public could be very easily aroused in protest.

. . . "Senile and arteriosclerotic psychoses are a serious social problem. They are disruptive to the family, as are any psychoses. In the early stages the individual is apt to squander his resources and become socially dependent. They do contribute to the public burden of nonproductive people and the large tax burden carried by the public.

. . . "We find that there are many promising leads to research in the field of metabolism, endocrine function, organic pathology, and psychopathology and treatment, but these leads are not being pursued very vigorously. There is great need for funds devoted to research in this field and for conferences providing an exchange between investigators. We need to know more clearly than we do what the effects are of removing a person whose memory may be good only for more remote experiences, from home and family and from his familiar haunts and placing him where his only hold on reality depends on his retention of memory for recent events. Does this produce more confusion and hasten deterioration? We need to know the meaning of the lucid periods that occur in these cases. Are they due to metabolic fluctuations? Can we understand these enough so that we can control the metabolism of these patients sufficiently to insure lucidity for longer periods? There is reason to be hopeful about the contributions of research, but currently these contributions have not reached a point where they are easily translatable into techniques of treatment. Research is our immediate problem.

. . . "Society is rather hardhearted and hardfisted. This attitude, I believe, is however more characteristic of North European than South European and other peoples. Mexican families do not abandon their old people as readily as do we, unless they have lived among us long enough to learn to do so. Our Porto Rican citizens are much more sensitive to old age and our Southern negroes maintain a warmth that many of us have lost or never held. Fundamental to our attitude toward the ills of old people is our placement of a low level of value on human worth in the declining years. If we take another illness, such as leukemia in a young person and describe it we would find ourselves confronted essentially with the same qualities as are found in senile dementia or arteriosclerotic psychoses. It is chronic, fatal and an immense burden to the family. With the young patient, we have great feeling; with the other, little. This is a factor that has to be taken into account. The treatment of old people is a yard stick of our civilization. Is it sturdy or weak? Does it show that we are likely to withstand the tests to which our humanity is subjected in many aspects of life today? This is more than a problem of the declining years of 20th century Americans."

Daniel Blain comments:

"The subject which you are discussing, 'preventive geriatrics' is one of which is of great interest to me, although I am not necessarily the best informed person on it. I believe that as far as psychiatry is concerned and the emotional condition of old age, there is probably a better chance of preventing hospitalization of geriatric patients for mental illness than for any other age group. In other words, prevention has a better chance here than in any other age group that I know of.

"Naturally, I am not referring to the organic conditions, such as arteriosclerotic deterioration and other things of that nature, since no one has yet discovered the cause of prevention of arteriosclerosis of the brain, that is something we must leave aside temporarily.

"I am, however, referring to more generalized effects of aging which are seen in mild and sometimes severe loss of memory, accentuation of personality traits such as aggressive or passive tendencies, tendency toward confusion, misunderstanding and misinterpretation of events going on around sometimes due to poor sight or hearing, and the most important part of the whole complex, namely—the frustrations which people of advancing age are forced to put up with both at home and in the world surrounding them.

"There are some programs going on now which indicate that elderly people who have an opportunity to keep busy and interested and to work among those who

understand and appreciate them show a much reduced rate of mental hospitalization. The small houses of today prevent the proper taking care of three generations in one residence, the fast pace of modern life, the frailities which multiply the stresses which people are forced to accept, the hidden organic conditions such as weakness, aches and pains from lack of calcium, and other types of deprivation, all of these make old age a very difficult problem to put up with and face. In addition to that, the downhill end of life with constant struggle to put off ill health and face final death are not the most optimistic periods of life by any means. Yet, I am convinced that the opportunity of assisting elderly people to put up with these stresses and strains, to handle their deprivations and frustrations, involves a much simpler form of program and is far more practical than any that we now have for assisting youngsters to grow up in more hygienic homes and, in general, to control the environment of the people at an earlier age.

"Types of care for elderly people range from different forms of institutional care which, in my opinion, should not really be hospital care but rather nursing home type of care with sympathetic personnel to assist them with the aid of volunteers and the use of other methods of keeping them in touch with the community. It also involves assistance to those living at home to be away for part of the day, to maintain their interest, it involves a certain amount of family co-operation which can be obtained perhaps fairly successfully by causing other members of the family to recognize and assist an elderly person rather than criticize them when they become feeble or confused, overly anxious, or short tempered."

Heredity

James V. Neel says:

"Inasmuch as the chronic diseases are seen with a disproportionate frequency among the older segment of the population, many of the statements made in that summary of a paper titled 'Heredity in the Prevention of Chronic Disease' are applicable to the problem at hand. There can be no doubt that genetic factors are of importance in the development of certain types of cardiovascular disorders, diabetes mellitus, a variety of neurological and ophthalmological disorders seen in the older age groups, certain types of arthritis and even some of the malignancies which predominantly affect individuals in the older age groups.

"It is one thing to recognize the role of heredity in these various diseases; it is quite another thing 'to do something about it.' The best advice would of course be to pick one's parents with care. Seriously, since legal strictures on human reproduction are obviously out of the question, then it would appear that the chief contribution which the science of genetics can make to 'prevention of disease and the postponement of senescence,' is to aid in the prediction of which individuals are unusually susceptible to the development of particular types of disease. The concentration of attention upon such individuals carries with it the possibility of a very early detection of particular diseases, at a time when irreversible pathological effects have not yet developed. Diabetes is a case in point. There can be no doubt as to the familial concentration of this disease. Ford and Glen have demonstrated that in screening programs, the unrecognized incidence of diabetes is five times as high among the relatives of known diabetics as it is among the general population. Consequently, the regular testing of individuals who are hereditarily predisposed to the development of diabetes carries with it the possibility of detection of early cases of diabetes with the corollary possibility of bringing the disease under control at an early stage and thus retarding the pathological sequelae of diabetes mellitus.

"In summary, then, while I feel that the facts of heredity supply at least a partial explanation of why certain individuals appear to age more rapidly than others and become subject to a variety of chronic diseases of old age, I do not feel, given an elderly group, that the science of heredity offers any practical solution to their problems, except to indicate to a limited extent which individuals are subject to the development of particular diseases."

In the field of prevention of more specific diseases numerous comments are listed below.

Proctology

J. Peerman Nesselrod submits the following:

"Since polypoid disease of the large bowel is potentially pre-cancerous, and since it is asymptomatic early, it behooves the physician to adopt the slogan that no physical examination is complete without proctoscopy. To this should be added careful x-ray study of the colon. If such practice were adhered to it would be possible to prevent many cancers of the large bowel and to detect many more at a time when they are amenable to proper surgical management. The benefits to the geriatric patient are obvious."

Orthopedics

In the field of orthopedics, Edward L. Compere comments:

"Orthopedic problems associated with the process of aging are indeed numerous; they involve muscles, ligaments, and the entire bone skeleton of the human body. The reasons why some individuals grow old biologically, while still young from the standpoint of the years which they have lived, are not clearly understood. Deficiencies in secretion of certain of the glands of the body, particularly the sex glands, have of course been suspected for a long time. Dietary deficiencies undoubtedly play a part. We have learned that much can be done to relieve the symptoms of generalized osteoporosis, so often present in patients sixty years of age or more, by administering a combination of sex hormones, vitamin D in high concentration and a diet which is rich in protein and calcium.

"Conversely, it would seem to be a reasonable assumption that if the addition of any one or all three elements referred to above does have an ameliorating effect and produces an increased sense of well-being, lessening of pain in the back or in other weight bearing portions of the body, the earlier recognition of deficiencies in the diet or of glandular deficiencies and an attempt being made to correct those conditions might delay for a long time these evidences of senescence such as senile osteoporosis, degeneration of skeletal muscle with scar tissue infiltration, stiffening of ligaments, et cetera. Although a vast amount of literature can be found dealing with such questions as calcium and phosphorus metabolism, protein metabolism, et cetera, we are still lacking in many of the answers needed in order to obtain the knowledge necessary for outlining a really comprehensive program which might be expected to prevent or delay some of the distressing conditions affecting the orthopaedic tissues and functions of the human body.

"Studies which would make possible more accurate answers to those questions would be expensive and could only be financed by one of the very large foundations. Certainly, however, it would be worthwhile, and it is hoped that a program of study will be mapped out by your committee. I shall be most interested in reading the article when it does appear under the title, 'Preventive Geriatrics'."

Physical Medicine and Rehabilitation

The contribution of Michael M. Dacso and Howard A. Rusk from the angle of physical medicine and rehabilitation is as follows:

"The nub of successful prevention lies in early detection and correction. The shortcomings of the mass and spot health surveys are evident but it must be admitted that such studies have contributed a great deal to the early discovery of many conditions. It has been recommended by various health authorities both in this country and abroad that permanent documentation of the health histories of every individual in the population would greatly help the fight against chronic disabling disease. The various recommendations differ in technical details, but they all agree on the basic principle that every individual should have a document on which all the essential health events throughout his life would be recorded. Starting from birth, a complete record will be maintained to include all immunizations, diseases, accidents, and operations. Realizing that in many cases it would be undesirable to have the patient possess detailed confidential medical information, such entries should be limited to a mere general reference to the nature of the disease, or test, and the source (private doctor or hospital) from which more information can be obtained. The entry of such data as time spent in the tropics, prolonged exposure to industrial hazards, et cetera, should also be included.

"The introduction of rehabilitation in clinical medicine has given a tremendous boost to the prevention of disabling conditions so common in the later years. The properly rehabilitated young polio patient, or one with rheumatoid arthritis, if adequately followed for several years is very unlikely to develop disabling deformities. It is important to remember that in the younger years patients suffering from various neuromuscular diseases learn certain 'tricks'—often physiologically undesirable —to compensate for the loss of function. In the latter years, however, when powers—both physiological and psychological diminish—compensatory mechanisms no longer function effectively and the disability becomes progressively worse, finally confining the old patient to bed. It is the function of rehabilitation to prevent such unnecessary occurrences.

"In a previous publication 'Clinical Problems in Geriatric Rehabilitation' one of us gave a practical clinical classification of the geriatric patients who can benefit from rehabilitation.

"1. Obviously handicapped patients (hemiplegia, arthritides, fractures, amputations, and neuromuscular diseases).

"2. Those chronically ill without signs of a manifest disability (chronic cardiacs, chronic pulmonary diseases, etc.).

"3. The elderly persons who are not obviously ill but who have impaired physical fitness.

"It is in the third group that the preventive aspects of rehabilitation are presently most neglected. In many cases the self imposed, illogical and unnecessary physical inactivity together with an insufficient diet will cripple the older patient without any underlying pathological condition. The physical medicine and rehabilitation specialist is prepared to evaluate objectively the patient's physical capabilities and, if need be, improve them with properly applied and graded physical activities.

"A more intensive concentration on this third group of paticnts could prevent a great number of them from needlessly crossing the line between a useful and physiological senescence and a useless and burdensome senility.

"The great problem of incontinence of the aged can very often be solved by using the well proven methods of bowel and bladder training. Keeping the patient dry and reasonably active is the best preventive against bed sores which are known to be one of the major complications of the disabled bedfast older patient."

George T. Harrell, believes:

"The approach considering geriatrics and the problems of old age as the job of the general internist or practicing family doctor rather than a specialist in geriatrics is a wise one. My comments might be read in that light.

Medicine

"I have been particularly interested in the field of infections. I have no idea why elderly people seem to be particularly susceptible to acute terminal infections with Escherichia Coli or as to why they are particularly susceptible to Type III Pneumococcal and Friedlander's respiratory infections. Chronic urinary tract infections are also extremely common but I do not know that any particular organism has a greater affinity for elderly people than for other age groups. I've no idea whether the mechanism which results in these infections is the result of some defect in the host resistance on the part of the patient or whether some common denominator in the growth requirement of these organisms is met by elderly individuals. I presume the relative resistance to viruses of older people is the result of acquired immunity from chance exposure over periods of years. In any event, all of these factors are susceptible to proper experimental investigations. Another point concerned with infection in elderly people is the danger of repeated use of antibiotics, especially the newer broad spectrum ones that are administered orally. The development of drug-fast or antibiotic resistant strains is not as great a danger I believe as the interference with nutrition of the patient. I believe there is increasing evidence that these antibiotics of which aureomycin may be taken as a type interfere with intracellular enzyme systems of the host in some fashion. You are, I am sure, familiar with the fact that aureomycin is a growth stimulating substance for many animals and plants quite apart from its anti-infective action. How this observation would be translated into practical application in geriatric patients I do not at the moment see but I think it does give us a hint as to the type of enzyme system that might be involved. Maintenance of proper nutrition in elderly individuals is a great problem as you know, whether or not drugs are given which could interfere.

"The problem of nutrition in geriatric patients I am sure is well known to you. You doubtless are obtaining other comments in this particular field. The dangers of obesity as far as the circulation, the susceptibility to diabetes which in turn lowers resistance to infection has been stressed many times. The under nutrition of elderly people as a result of food fads or gradual restrictions of the variety of foods taken in the diet also needs to be considered. How much under nutrition contributes to the susceptibility of older males to tuberculosis is not clear. I should have mentioned this unusual age susceptibility of men past sixty in the preceding paragraph. It is not clear whether the osteoporosis seen in so many elderly people is a result of the hormone imbalance or the result of nutritional disturbances. Many elderly people seem to metabolize vitamins, minerals and proteins in a normal fashion. On the other hand, there is a good bit of evidence that on standard diets bones will decalcify with disuse and that fractures will not heal if the protein going to make up the matrix of bone is not formed properly. Studies on the bones of children have seemed to indicate that in many instances the mineral deposition is more or less of a passive physiochemical process dependent upon a proper protein matrix. I would not expect that achlorhydria, which of course increases greatly with advance in years, would seriously inter-

fere with nutrition. I do not recall that any evidence has yet been presented to indicate that the intrinsic factor also diminishes as achlorhydria develops in older people. They may require more B^{12} in the diet but I think they would still absorb it.

"I do not feel qualified to comment on the circulatory disturbances of old age—particularly arteriosclerosis or atherosclerosis. I have, however, been interested in the problem of myxedema. In this disease a considerable degree of atherosclerosis may develop at an early chronologic age; it seems to be exactly comparable to the atherosclerosis developing normally at an older chronological biologic age. As you know myxedema disturbs the protein metabolism as well as the cholesterol metabolism. Older people have diminished thyroid activity though they do not necessarily have demonstrable myexedma. It may be that further observation of the changes in the lipo-protein complexes, their relationship to general nutrition and to thyroid function as well as to the enzymatic breakdown of the complexes and the metabolism of the lipid component may give some light into the circulatory disturbances.

"In the Committee on Chronic Illness of the North Carolina State Society we have been particularly interested in the psychological needs of older people. One individual, an older woman in our State Department of Welfare, has recognized this need and has been singularly effective in meeting the needs of older people. We have observed that geriatric patients often do much better in boarding homes or nursing homes than in a hospital. Of course, we feel ideally they should be in the home of some relative where they can feel needed. I am sure you will have expert opinion in this general field. Similar stress should be placed on the possibility of pointing out in middle age the need of adjustment psychologically to retirement whether or not illness comes on. It is very strange that older people in an environment where they are happy seem to brighten up, become more alert and show fewer evidences of degenerative processes if they are in an environment where they are psychologically well adjusted."

Tuberculosis

In a statement for the Geriatric Committee of Michigan State Medical Society, Floyd M. Feldmann reports the following:

"Tuberculosis is a preventable communicable disease. Of primary importance in prevention is the interruption of the spread of tubercle bacillus. This means case-finding, isolation of the active case, and modern treatment. Fortunately, only a small proportion of persons infected with the tubercle bacillus develops the disease. The reasons for this are complex but, in the opinion of many, such things as nutrition, fatigue, and constitutional factors determine to a large extent which persons will develop active tuberculosis after once being infected and when this will occur. Although tuberculosis attacks all age groups of both sexes, the higher mortality rates are in older men. Paradoxically, this does not mean an increase in risk as people grow older; these high rates in older people represent a residual from the higher infection rates of earlier years and breakdown results from secondary factors rather than from new infections.

"It has been demonstrated that some immunity to tuberculosis can be built up by the use of vaccines, such as BCG, but immunity is far from perfect and of uncertain duration. Most authorities now believe that BCG should be given to those persons most likely to receive repeated infections with the T.B. bacillus.

"With these facts in mind the practical program for the prevention of tuberculosis both in the young and the old should include the following items:

"1. Case-finding procedures to discover the estimated 150,000 active cases in this country not now identified. Periodic examination including chest x-rays in the offices of private physicians, hospital admission x-ray examinations, mass x-ray surveys, and the auxilliary use of tuberculin test are some of the tools now at hand.

"2. Isolation of our 400,000 active cases, coupled with modern treatment to stop the production and to prevent further dissemination of the bacillus. Although treatment in a tuberculosis hospital is preferred, many patients must be treated at home. Drugs and surgery under an individualized long term plan can be of great benefit, but drugs cannot be used in the same manner as for acute diseases.

"3. BCG vaccination for certain groups as recommended by the American Trudeau Society:

(1) doctors, medical students and nurses who are exposed to tuberculosis;
(2) all hospital and laboratory personnel whose work exposes them to contact with bacillus of tuberculosis;
(3) individuals who are unavoidably exposed to infectious tuberculosis in the home;
(4) patients and employes in mental hospitals, prisons, and other custodial institutions in whom the instance of tuberculosis is known to be high;
(5) children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high.

"4. Emphasis on general measures known to affect the tuberculosis morbidity and mortality:

(1) improvement of housing to reduce crowding and opportunities for the spread of infection;
(2) improvement of nutrition through research, education, and better food production and distribution;
(3) elimination of industrial hazards, such as silica dust;
(4) medical supervision of every person, including periodic chest and x-ray examinations."

Medicine

Harding leRiches, writing for Arthur F. W. Peart, contributes the following:

"In Canada, like in the United States, the diseases of degeneration and of old age are becoming increasingly important. . . .

"The latest figures for Canada, 1951, show the numbers of deaths associated with senescence as a percentage of total deaths as follows:

1. Cardiovascular disease—42.5 per cent.
2. Malignant neoplasms—14.2 per cent.
3. Accidents and deaths by violence—7.4 per cent.
4. Nephritis and nephrosis—2.4 per cent.
5. Diabetes mellitus—1.3 per cent.

"In formulating a research plan for the study of geriatric problems and the diseases of senescence, I feel a great deal could be done in the medical field by utilizing in clinical practice those preventive measures already known to modify those diseases associated with the relentless process of aging. Such educational efforts should commence in the medical schools giving students a good background in clinical preventive medicine. The following are some of the examples of what I mean:

(a) "While the whole story is not known about congenital cardiac deformities, recent work has indicated that prenatal anoxemia or toxemia at a critical period of fetal development may influence the physical development of the heart. The best known example here is German Measles in pregnancy. The role of surgery in correcting congenital deformities is important in a small number of cases. The prevention of subacute bacterial endocarditis in these patients and in those who have already suffered from rheumatic fever is possible in many cases.

(b) "Rheumatic heart disease is the most important cause of valvular disease in childhood and early adulthood. The possibilities in the prevention of this disease should be more effectively brought to the notice of medical students and physicians. Attention to this disease alone will exert a profound influence in reducing cardiovascular disease in all age groups.

(c) "In the field of arteriosclerosis, hypertension, and coronary disease a great deal can be done in the field of prevention, ranging from advice on the proper diet to information on psychological factors in coronary disease and the avoidance of obesity. It is possible that early attention to various types of lung disease could reduce the prevalence of lung fibrosis and subsequent development of our cor pulmonale.

(d) "It is becoming clear that the single most important preventive and therapeutic measures in the prevention of diabetes mellitus and atherosclerosis lie in applied dietetics with due attention to endocrine imbalances. In the field of nutrition a great deal of experimental work should be done not merely on animals but in safe human experiments similar to those carried out some years ago by Professor Ancel Keys. I feel sure that many older people would be quite willing to participate in various nutritional research experiments which could provide a great deal of important information.

(e) "Apart from metabolic disease, accidents, including home accidents are becoming increasingly more important as a cause of death not only in old age but in all stages of life. More detailed studies similar to those carried out by Dr. John Gordon, should be undertaken and each county medical society should itself undertake educational campaigns not only amongst their own members, but in medical schools, nursing schools and among the general public to emphasize those practical steps which may be taken to prevent death and injury by accidents in the home, highway, and the factory.

(f) "We should make a decisive effort to discover whether it will be possible to prevent the diseases commonly associated with old age, leaving behind only the physiological aging process which will lead to well adjusted happy aging, as far as possible associated with adequate mental adjustment among old people.

"I would like to say that in my view considerable grounds for optimism exist in the field of geriatrics provided all existing knowledge in this field is used to the full in the medical and allied professions. We already have an important tool in our hands to stave off or modify conditions such as diabetes mellitus and certain cases of hypertension. This is in the field of dietetic control. It cannot be sufficiently stressed how many millions of Americans and Canadians are eating themselves into an early grave."

Problems in General

Arnold B. Kurlander and Cletus L. Krag comment as follows:

"We have given some thought to the questions raised in your letter of April 14, 1953, regarding the prevention of disease and senility among the aged. The following statements are some of our views on this most important subject.

"A community approach to this problem of health maintenance in old age may be outlined as follows:

"1. Research and fact finding.

"2. Prevention of disease, disability, and premature death.

"3. *Early and Adequate Care of Illness, Injury, and* disability.

"4. Education

"1. *Research and Fact Finding.*—In order to know just what the health problems of older people are, certain facts must be available. From these facts, control efforts may be directed into appropriate channels. If, for example, it is not known how many untreated diabetic patients or active cases of pulmonary tuberculosis there are in the community, both of which are most prevalent among the aged, then the need for, or the effectiveness of, tuberculosis or diabetic control programs cannot be put on a sound basis. Likewise, without appropriate facts, educational programs may be misdirected or ineffectual.

"2. *Prevention of Disease, Disability, and Premature Death.*—In scope, this encompasses all of the traditional public health activities, in the fields of the environmental sanitation including sewerage disposal, and food, water, and milk control.

"Old people are subject to a number of communicable diseases; and in some respects, they are more susceptible than the young due to lowered resistance and vitality.

"Special efforts are also needed to combat the increasing prevalence among the aged of non-contagious diseases such as cancer, cardiovascular disease, arthritis, diabetes, and mental illness.

"Although most of these cannot be prevented in the same way that typhoid fever can through sewerage and water control, early and proper treatment can nevertheless prevent the further progress of these diseases.

"Accidents are particularly common among the very young and the old. Many of these can be prevented with a consequent decline of disability and premature death.

"3. *Early and Adequate Care of Illness, Injury, and Disability.*—The results of delayed or inadequate treatment of illness, injury and disability during youth will often leave residuals which affect the health when old age is reached. Likewise, inadequate care in old age will also impair the health and function of the mind and body. The need for rehabilitation services for disabilities such as the loss of an arm or leg or paralysis, are just as important to the aged as the young in preventing mental deterioration and dependency upon others for care.

"4. *Education.*—Fundamentally, good health in old age will be determined to a large extent upon what the individual does to maintain good health. It will also, of course, be determined in part by healthful environment and also the facilities available for proper care when sickness, injury, and disability do occur. Education, therefore, becomes an integral and important aspect of prevention of disease and senility among the aged. This is of importance not only in terms of educational programs for the lay public, but also to those who care for the sick, those carrying on public health programs, those directing and carrying on research programs, and those who are responsible for various community and governmental programs having a direct or indirect effect on the health of the people."

Dermatology

A. E. Schiller writes:

"Having been intensively interested in the dermatological approach to geriatric care, I feel that in our particular field the recognition of the following items may result in the retardation of the deterioration now associated with senescence of the skin.

"First, I would like to list the common group conditions that we see in the aging individuals in the order of their importance:

"1. Senile pruritus
   (a) Background probably arteriosclerosis.
"2. Seborrheic and senile keratosis
   (a) Increasing sebaceous activity.
   (b) Growth of epithelial nevi.
   (c) Excessive sunlight exposure

"3. A variety of conditions due to
(a) Circulatory abnormalities.
(b) Nutritional deficiency.
(c) Lack of proper care.

"4. Epitheliomas
(a) Basal cell epithelioma.
(b) Squamous cell epithelioma.

"5. Circulatory Eczema—and leg ulcer.
(a) Not always associated with obvious varicosities.
(b) Low-grade secondary infection.
(c) Sensitization to some therapeutic agent.

. . . I think the following quote will cover a good many points:—'Before the more common dermatoses noted in this group are discussed, it is hardly necessary to emphasize that senile cutaneous changes do not develop at any particular age. The onset of such changes is just as variable as the beginning of senile changes in the ear, eye, joints, and arteries, and the rate of alternation varies greatly in different persons. In the general examination of older patients the physician finds that as the years pass, the subcutaneous fat is lessened and the skin becomes less elastic and thinner and more wrinkling develops; the color may become grayish or yellowish, perhaps with pigmented or de-pigmented areas and there may be a variable amount of dryness and scaling, especially in cold weather. There is also the appearance of gray and white hair as well as thinning and possible entire lack of hair on the vertex in men. In addition, the phyician will find in many older people, hyperpigmented areas, especially on exposed surfaces with varying degrees of pigmentation, including de-pigmentation, small capillary tumors or angiomas, small pedunculated fibromas, small verruca, keratoses, etc., many of which have been present so long or have developed so gradually that they are accepted by the patient as part of the aging process."

Still in the field of dermatology, Paul O. O'Leary has the following to say:

"Under heridity, complexion is of importance. In other words, the sandy-haired, blue-eyed individual with the so-called Chataigne type of skin is prone to serious trouble as he grows old and the trouble is aggravated by exposure to the elements, especially the sun and wind, the frequency with which the keratoses develop, which in turn become malignant. Also, under heredity, are the individuals born to eczema, so-called atopics, members of the so-called allergic groups, in which the eczema is part of the asthma-hayfever-eczema-complex. Also there are the congenital ectodormal defects, usually serious and incapacitating skin diseases. Then, too, the nevi, both vascular and cutaneous, should be included in this group.

"Under the heading, environmental, I would include the weathering effects, namely, the development of keratoses and subsequent epitheliomas in the individuals who have a small amount of pigment in their skin. The lesions of course are not always the result of aging and weathering as in xerodema pigmentosa, the changes come on very early in the child's life. Environmental effects in the production of cancer in the mouth from irritating teeth and tobacco are to be considered, and similarly, the development of carcinomas of the vulva and of the penis as a result of aging changes such as atrophy, kraurosis, and leukoplakia of the vulva and glans penis, must be borne in mind. The weather effects on those who live in the southwest part of the country seem to be more troublesome than those who live in the north. In other words, sun and wind apparently are more troublesome than cold."

Hearing

Says Aram Glorig:

"From the standpoint of the hearing field preventive geriatrics has a very little place, the aging process on hearing is one about which very little can be done similar to the aging process on the eye.

"Hearing loss due to age is a high frequency loss and therefore doe not affect the speech range in the average case until ages over seventy to seventy-five are reached and this is not usual.

"We know so little about the inner ear and its physiology, it would be hard to propose any method which would be applicable to preventive geriatrics. The greatest effect on the function of hearing in older people is that which occurs to the auditory-cortical areas rather than to the ear itself, and this is the effect of general mental aging. This problem sums up to be one which is centered more in the use of general measures which could benefit the individual as a whole rather than in procedures directed especially at the ear. There is probably one exception to this: this is the deafness which is produced by exposure to excessive noise. It is definitely known that individuals who work for long periods of time in excessive noise do become deaf and naturally this deafness is increased with age because of the very nature of the individual's employment. This problem is being adequately studied by the American Academy of Ophthalmology and Otolaryngology through the Committee on Conservation of Hearing."

Ophthalmology

In the field of ophthalmology, Franklin M. Foote has the following to offer:

"We are very much interested in eye problems of middle age and older people. Suggestions about the postponement of senescence as related to eye conditions in this group are only theoretical at the present time. These would include suggestions as to improve nutrition, avoidance of infection, and similar measures which would improve general health and prevent general senescence. There seems to be no sound scientific information that good lighting or that avoidance of close work would prevent or reduce organic eye disease.

"However, one measure that there seems to be good evidence for, is the recommendation of a thorough professional eye examination at least once every two years after the age of forty. It is after this age that blinding eye diseases such as glaucoma, uveitis, and many other conditions, are most common. Many of these conditions are insidious in that they produce no sign or symptoms of trouble in the early stages, and these symptoms do not become great enough to bring the patient to the oculist until the condition is pretty well advanced. However, a careful eye examination can discover these conditions in the early stages and many such diseases which cause loss of vision can be best treated if found early. This is particularly true of glaucoma and uveitis.

"Because of geographic circumstances or other reasons, it may not be possible for every person to obtain an ophthalmological examination every two years. In such cases, we recommend that such persons be examined by his own family physician and that his examination include a Snellen test for visual acuity and ophthalmoscopic eye examination. Some general physicians are also taking the tension using a tonometer."

Derrick Vail writes:

"I am very much interested in the study that you are conducting on geriatrics. As a practicing ophthalmologist, many of my patients, as you know, are elderly people, suffering from ocular diseases.

"I have very little to suggest in the solving of the

problem of aging, so far as the eyes are concerned. As you know, they share in the entire aging process and the prolongation of life has resulted in many serious ocular disturbances, such as senile macular degeneration, associated with sclerosis of the choroidal vessel, combination of vascular hypertension. Arteriolosclerosis, with and without diabetes, also is one of our thorny, ocular problems which we are seeing much more commonly now that the people are growing older. Cataract is a disease of senescence in most cases. Glaucoma has some association, but all of these ocular problems are essentially tied in with what is going on in the body as a whole, and we are back where we started from. The early recognition of glaucoma and proper treatment is, of course, essential to the saving of eyesight, but even in cases where the tension has become normalized by surgical or medical treatment, frequently visual deterioration continues, due to sclerosis of the nutrient vessels of the optic nerve. So far as I know, cataract removal of it nowadays presents very little difficulty, cannot be prevented or treated medically. Surgically even in the very aged. The oldest person I operated on for cataract was a doctor of 101. This was successful, and the patient lived two years.

"As I see it, the problem is essentially that of proper blood supply and nutrition. I believe that work should be continued along investigation of this phase of the subject."

A. D. Ruedemann offers the following:

"The problem of geriatrics is one that confronts us and must be considered at all times in ophthalmology. With our late vascularity diseases of the retina and the senile type cateracts and with other conditions such as entropion and ectropion of the lids, it becomes an important subject with us.

"I think first and foremost would be the prevention of cateracts which would appear to be a deficiency disease, primarly on a dietary basis, over a long period of time. Secondly, it would be a low degree of endocrine disturbance such as we see coming on at the climacteric and I think when both of these main problems are well controlled that senile cataract is definitely deferred.

"The vascular diseases are within the realm of the general medical man but an entropion and ectropion are due to relaxation of the lid or irritation of the lid and again, are on a long standing chronic basis. Finally, we must not forget that presbyopia comes to everyone who lives beyond the age of 40. So geriatrics is as you can see a prime disease among the eye men."

General Considerations

W. C. Hueper states:

"Faced with a rising proportion of elderly patients, physicians will be called upon to diagnose and differentiate to an increasing degree between the pathologic and physiologic manifestations of old age and the various factors that cause biologic aging. An effective prevention, mitigation and, possibly, partial reversal of the senescent processes surely will depend upon a clearer and more comprehensive understanding of the causative factors and their action mechanism. A greatly improved control of senescing changing is not only desirable as a means of lengthening the useful and enjoyable period of life, but, under the existing sociologic and economic conditions, may become an urgent necessity. Our present socio-economic pattern is ill adapted for taking care of the incapacitated senescent individual within the circle of the family. The great majority of elderly persons depends totally or partially upon public support. It is therefore in the general interest to maintain the older individuals in as good a physical and mental condition as possible so as to keep them economically self sustaining.

"There exists moreover definite prospect that reliable and exact information on physiologic and pathologic aging and the availability of a 'biologic age rating' might prove to be of distinct value in determining future policies as to the so-called retirement age. It is quite obvious that the present widespread practice of enforced retirement at a certain chronologic age without regard to the relative biologic age of the individual is neither wise from the human standpoint nor economical from a sociologic viewpoint. It is a system that is bound to squander carelessly a great deal of painfully acquired and very valuable professional experience and human wisdom. It should prove to be much more rational, practical and humane to base the time of retirement and/or reduced professional activity on the relative biologic age of the individual.

"Although the average life span of man has been lengthened considerably through an increasingly successful control of diseases, there is little evidence that this development has been accompanied by a lengthening of the absolute life span. It appears therefore that the physiologic and/or pathologic factors that control the so-called 'aging' processes have not appreciably been changed by the suppression of health hazard related mainly to communicable diseases. The shift in average life span is chiefly the result of a reduction of deaths associated with infectious diseases occurring during childhood and early adult life and a corresponding increase of deaths of elderly individuals from 'degenerative' diseases, such as arteriosclerosis, hypertension, cancer, chronic nephritis, and diabetes. Thus, at least a part of the problem of aging seems to depend upon a better control and understanding of the factors that cause these 'degenerative' diseases which are the most prominent causes of disability and death during the late adult and senescent period of life.

"However, even if such efforts should be effective, they probably would result in merely lengthening the average life span without appreciably influencing the absolute life span, or removing entirely the incapacitations associated with growing old. To be successful in the latter it is essential to acquire a great deal more fundamental facts as to the factors responsible for the physiologic aging of tissues, organs, and whole organisms than we possess at present. Biologic aging, in contrast to chronologic aging, designating a mere time relation, is the result of the action of physiologic and pathologic factors which may accelerate, modify or delay the normal senescing processes that affect the tissues and modify their function from the prenatal period to death. Constitution and environment, therefore, determine the biologic age of an individual in relation to his chronologic age. He may be young, normal or old for his 'age.' Moreover, the aging process may not, and usually does not, affect uniformly the entire organism but some tissues or organs may age faster than others (disharmonic aging). Typical examples of this fact are represented by the earlier arrest of function and atrophy of the placenta, the thymus, and the female sex organs. Physiologic aging seems to be determined by the balance of pro-aging (progeric) and antiaging (antigeric) factors. This process furthermore can be modified and complicated by pathologic factors (infectious diseases, dietary deficiencies, poisonings, climate, occupation) which not only act upon the physiologic aging factors but which may add new, abnormal features to the physiologic aging process.

"The existing knowledge on the various manifestations of biologic aging is much too defective to permit an expression of the relative biologic age of an individual in concrete and precise terms ('biologic age score'). Such judgments usually take at present the form of mere comparative impression, such as 'she looks ten years younger than her age'; or 'he appears to be fifteen years older than his actual age.' It is obvious that such a procedure is not only very crude but also rather unreliable, arbitrary and often meaningless. There exists, therefore, an urgent need for extensive and detailed

studies of the factors that control physiologic and pathologic aging processes and for establishing definite and distinctive criteria of physiologic and pathologic aging, as it may become manifest in functional, physical, chemical, and morphologic reactions of tissue, tissue fluids, intercellular substances, blood, lymph, organs and the organism.

"It is not likely that every sharp line of demarcation can be drawn between physiologic and pathologic age factors, since some aging factors are of ambivalent character. Nevertheless there is a basic necessity for determining criteria of phyiologic aging and the factors responsible for this process. Only when this baseline has been ascertained, is there a possibility of etablishing criteria of pathologic aging, and of discovering the nature and effects of pathologic age factors."

Since cancer is one of the major diseases associated with the aging group, Charles S. Cameron suggests in the field of prevention those measures offered in the Technical Statement of the Preventive Aspects of Cancer prepared by the National Cancer Institute and the American Cancer Society for the National Conference on Chronic Disease. The measures follow:

"1. Prevention of future contamination of the human environment by known or suspected physical and chemical cancerigenic agents and institution of all possible preventive, protective and prophylactic measures in all plants, workshops, laboratories, mines and mills where carcinogenic agents are produced, handled, or used.

"2. Educational campaign among members of the medical profession, public health officials, industrial hygienists, and other interesting parties to become increasingly aware of the existence and nature of environmental cancerigens and to become interested through increased alertness in the discovery and prevention of human cancers with known or suspected causation.

"3. Organization of systematic and extensive studies on cancer epidemiology and etiology on the basis of the entire country, individual states, regions, industries and occupational groups.

"4. Development of improved and rapid methods for screening exogenous and endogenous environmental agents for cancerigenic properties.

"5. Development of etiology specific diagnostic tests."

It is a frequent clinical observation that when an individual retires, there is frequently a rapid superimposition of organic disease upon the senescent individual. The exact reasoning for this has always been a mystery to me, but there undoubtedly is some relationship between the emotional state and the subsequent organic disease. If this mechanism were discovered, we would have some means of preparing an individual for retirement and thus help prevent this rapid increase of senescence and development of organic disease. This would be one positive approach of preventative geriatrics. (JRB)

In our efforts to prevent some of the problems of the elderly individual, we must point out to our patients during middle life, how important it is for them to begin preparation for their later years long before they arrive. We make plans for almost everything else we do, so why should we neglect to give consideration to the last twenty years of our life which should be enjoyable and leisurely spent doing some of the things we did not have time to do in the years before. (AHP)

First, it is self evident to most of us, that we must so regulate our finances that we will have enough left to provide us with all of the worldly goods that is necessary for our happiness. This amount will vary with almost every individual according to how he has been accustomed to living in his younger years, but he should also learn to scale down his standard of living according to his resources. The value of a dollar at one period in life may change a great deal from that of another, and this must be taken into account when planning our financial status. Economic insecurity is still without doubt the number one problem of our aging population and must be corrected before there can be peace of mind for those at retirement age. Employer and employe must together work out a more satisfactory plan than is at present in vogue. (AHP)

While it is important that the male member of the family provide the major part of the financial income, it is of paramount importance that his wife so prepare herself during her school years with some type of training which will enable her to assume the earning role, should it become necessary. A training in typing, bookkeeping, secretarial work, teaching, nursing, millinery, cooking or any one of several other vocations would prove invaluable if her husband became incapacitated or died. Too often girls graduate from a finishing school or liberal arts college with a good general education, but no specific knowledge of anything. This may prove to be a severe handicap, creating at times a state of frustration and many psychosomatic illnesses. (AHP)

While the need of careful preparation for our economic problems is of great importance, the necessity of developing a broad horizon of interest should also command our careful attention. We spend most of our time during early and middle life concentrating upon what we call our life's work, and are apt to neglect the development of other interests or avocations which become increasingly important as we grow older. Many of us worked all day at the office or shop, went home, read the paper and then to bed. We never seemed to find time for anything else. Unless these interests are gradually created over the years, we are apt to find ourselves at the stage of retirement with nothing to do, nothing to think about, bored with living and generally very unhappy. By contrast, think of the person who never wanted for something to do every evening. He liked gardening and enjoyed everything nature had to offer in the out of doors or he enjoyed sports of all kinds, played golf, bowled or was interested in working with boys or girls and their problems. He enjoyed working with tools and making fine furniture and metal pieces, liked to look at the stars and became an amateur astronomer. Some of us have lots of

initiative and need no prodding from ourselves or anyone else to develop any one of many interests. Some of us, however, need to realize our shortcoming in this regard and must, by aptitude test or just plain analysis of our likes and dislikes, work at the problem, going to school if necessary, in order to develop some avocation which will serve us well in our later years. (AHP)

It is our duty as physicians to point out these facts to our patients so that as they grow older, they will be preparing themselves for the last years of their life, a time when they should be happy and contented. They can best have this contentment by keeping their minds active, thinking of things worthwhile, and doing something that is constructive and helpful for someone else besides themselves. None of these things just happen, they result from careful consideration and preparation over many years' time. (AHP)

Old age is inevitable. Its infirmities are not. Of necessity, the declining years are all too often ones of marked decrease in physical and mental power frequently to the point of complete incapacity. Degenerative disease, starting at any time from early middle life, progresses with increasing frequency and severity as age advances. By degenerative disease is meant the vascular changes due to atheromatous deposits, the neoplasia that is most often an occurrence in later years, and the decline in physical activity, and drive which is the result of endocrine involution. In addition to these, the individual past fifty is heir to many of the ills befalling younger people: acute infections, chronic debilitating illnesses as exemplified by tuberculosis and the granulomata, leukemias and other blood dyscrasias, the collagen diseases, trauma and the host of pathological changes which can occur. (LFS)

It would seem that a logical approach to these kown facts is first, a healthy attitude on the part of the family, public and practitioner. Any one of these previously mentioned conditions merits an attempt to definitive therapy. In fact, many oldsters are less severly afflicted by disease than their younger counterparts. This is often true in diabetes. Also, neoplasms may take a slower and more benign course. It is amazing and often extremely satisfying to note that disease can be ameliorated in the old patient. Surgery, radiation, specific or palliative medication is just as much indicated at age eighty as age thirty and negative thinking is to be decried. (LFS)

In industry, a place should be found for those individuals able and wanting work. It is completely ridiculous and frequently a wanton waste of superb abilities to retire a person at a stated age as is so often done. Many people are old at forty and others young in actions and thought at seventy. Chronological age is often at great variance with physiological age and its potentials. (LFS)

I would recommend on optimistic attitude toward the aged person in both health and disease, with an opportunity for gainful employment as long as he is able to honestly produce results. (LFS)

Summary

The following material is based almost completely on the letters of the Discussants already mentioned in the text of the paper and especially including the suggestions appearing in the letters of Clarence I. Owen, F. L. Rector, Mac Roy Gasque, and David Seegal.

1. The contribution of heredity is very definite. The exact amount is a debatable issue. A promising future from an hereditary standpoint may be cut short by an auto accident. Less promising stock may be spared the more deleterious environmental effects and set a record for longevity.
2. The aging process begins with conception.
3. The effects of time on protoplasm may not be as momentous as usually thought.
4. The environmental stimuli (both internal and external) probably contribute most of the effects now attributed to the passage of time (aging).
5. The effort to add more life to living and more living to life must be begun at birth and continued throughout life;

(a) The adoption of those hereditary principles that can best be utilized by our present type of civilizations.
(b) First rate obstetrical care.
(c) Enlightened pediatric attention.
(d) The adoption of a unified interdisciplinary education and health program on a long range basis designed to promote the best interest of the individual and the community.
(e) Yearly physical screenings and if necessary physical examinations.
(f) Continued application of all the concepts of preventive medicine for the protection of the individual and the community.
(g) The following probably should be included under "(f)" but it received so much attention by most of the Discussants that it is being mentioned separately. "Avoid overeating and obesity."
(h) Careful study of dietary habits and vitamin requirements and intake.
(i) Since it is not possible for the human race to live like the cells of Carrel's tissue culture, spared of all environmental effects except the favorable ones, all should be as Hans Selye says in the dedication of the volume Stress . . . "Not, be cured of my stress but merely taught to enjoy it."
(j) Provide for all the opportunity for continuous productive employment throughout life. Voluntary retirement the only type recommended.
(k) Education for broader interests than just the bread and butter kind. This might well

include what some people chose to call a hobby. The physical and mental horizons of youth must be preserved by regular daily physical exercise and mental gymnastics.

6. "The socio-economic aspects are equally important and I feel," says Mac Roy Gasque, "that it is high time that the physicians recognize their privilege, even their obligation, to take the lead in shaping the matter of things to come." Some of the personal obligation the physician feels for his individual patient must be shared with the community for the solution of its problems.

7. Some effort should be made to better define both physiologic and chronologic aging.

8. The forces of medicine and the allied sciences should now be directed against the so-called chronic degenerative diseases of man.

9. Physical medicine and rehabilitation offer some definitely new and important concepts in the handling of this problem of aging.

10. Some solutions for the economic problems of the aged must be sought.

11. Preservation of family and friendly ties are a bulwark against loneliness.

12. Idleness is not only wasteful but contributes to biologic parasitism and degeneration of human society.

13. The mental and physical vigor of our present aged group probably is much better than a similar group of a few years back.

14. "A *modulation* program could be instituted in industry and occupations where a subtle of man's work in keeping with his altering physical power is indicated."

15. Some thought must be given to the housing plans of the future to make accommodations for the older inhabitants.

16. The establishment of geriatric clinics will probably be an answer to some of the health problems of the aging.

17. A good life can be built and senescence deferred by an upbringing in the home that emphasizes healthful living, good sportsmanship, community service, good citizenship, tolerance, industry and good money management.

18. The physician will have to learn new facts and assume a new attitude toward his older clientele.

19. The trend of the thinking of the Discussants and the Committee was very similar. Preventive Geriatrics as elaborated and as a working concept may "catch on." It will in general include all those measures that go to produce an excellent product and to assure its good care until that inevitable day when like "The Wonderful One-Hoss Shay" everything will fall apart.

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MSMS and the Salk Vaccine Experiment

IN 1953, the MSMS first considered the plans for the Salk poliomyelitis vaccine experiment, as proposed originally for twelve Michigan counties by the National Foundation for Infantile Paralysis. Various committees of the Sociey, and members of The Council as individuals, were instructed to seek information from independent sources regarding the Salk vaccine. Careful consideration of the problems attendant upon the experiment continued through the early part of 1954.

So great was the interest of MSMS that Jonas E. Salk, M.D., who developed the vaccine, was invited to speak at the 1954 Michigan Clinical Institute, as the Michigan Foundation for Medical and Health Education lecturer. Dr. Salk, however, was unable to accept.

Following is a chronology of events up to the publication date of the May number of THE JOURNAL, as the final position of MSMS developed:

March 12—In a meeting of the Executive Committee of The Council in Detroit, at which the State Health Commissioner was present, it became mutually apparent that neither the Commissioner nor the Executive Committee had the answers to three very important questions, namely:

1. What responsible authorities have certified or will certify the safety of the use of the vaccine and the control substance?

2. What reliable proof is available that the vaccine will not sensitize rather than immunize the children receiving it?

3. Who will assume legal and moral reponsibility for possible untoward results from the use of the vaccine?

These questions were phrased technically by the State Health Commissioner and agreed to by the Executive Committee. MSMS and the State Health Commissioner decided to seek satisfactory answers in writing from authoritative sources, particularly the Biologics Control Laboratory of the National Institutes of Health, United States Public Health Service, and the National Foundation for Infantile Paralysis.

April 1—In a meeting of the Executive Committee at Utica, it was reported the MSMS had not yet received satisfactory answers to its questions. The State Health Commissioner, who was present, indicated that he still shared the doubts which were in the minds of Executive Committee members, and stated that he hoped to have the answers to these questions for a meeting which he was calling at his office on April 14.

A motion was adopted stating that "The Executive Committee of The Council cannot recommend the use of the Salk vaccine for infantile paralysis until we have further assurance of its safety and that it will not in any way damage our children in the immediate or foreseeable future." A statement explaining this position, and supporting material, was drafted and approved by the Executive Committee for prompt distribution to component county medical societies in a Secretary's Letter.

April 2—MSMS wrote the State Health Commissioner formally stating that "MSMS can neither approve nor disapprove the proposed experiment, and must advise component county medical societies accordingly." Meanwhile preparations for the inoculation of several thousand Michigan school children had proceeded under the stimulus of the National Foundation for Infantile Paralysis.

April 3—A Secretary's Letter was mailed to the presidents and secretaries of all county medical societies stating the above three questions and pointing out that satisfactory answers had not been received from authortitative sources. A news release outlining these facts was prepared for distribution Monday, April 5.

April 4—In a nationwide telecast-broadcast a well known news commentator made a sensational statement concerning Salk vaccine, which, unfortunately, was confused with the MSMS position.

April 5—News release outlining the MSMS position was distributed to newspapers, radio stations and news services. This stated that "MSMS cannot recommend the use of Salk vaccine—until we have further assurance of its safety." In this release the MSMS Secretary stated: "The MSMS will be the first to endorse a vaccine demonstrated to be safe and effective against poliomyelitis."

April 14—At a meeting of county health officers, county medical society representatives, members of the State Health Commissioner's advisory committee on the vaccine field trials and representatives of

the National Foundation for Infantile Paralysis summoned by the State Health Commissioner, the experiment and the questions asked by MSMS were discussed. Additional questions dealing with the over-all safety of the vaccine as posed by MSMS following the April 1 Executive Committee meeting also were taken up. At the close of the meeting the State Health Commissioner framed a letter to MSMS stating in part: "At an executive session of the medical doctors present, the group expressed itself that all questions raised had been answered reasonably and satisfactorily. After discussion, it was moved, supported, and carried that the doctors of medicine present recommend that the Michigan State Medical Society take favorable action and immediately approve the proposed polio field trials in Michigan."

The Commissioner did not state his position in this letter.

April 15—MSMS received the April 14 letter of the State Health Commissioner. This letter declared that the Special Advisory Committee on Active Immunization of the National Foundation for Infantile Paralysis would certify the safety and potency of the vaccine to be used in the field trials, after reviewing the protocols for each lot submitted by the manufacturer and three testing laboratories. This letter also stated that the National Foundation, as owner of the vaccine, carried insurance indemnification for itself, and that the doctor of medicine administering the vaccine (who had no control over the experimental materials involved) already carried "malpractice insurance . . . adequate to cover the ordinary unavoidable accidents such as broken needles, et cetera." Accompanying the Health Commissioner's letter was a file of correspondence and information documenting the reply.

Among this supporting correspondence was a letter from Leonard A. Scheele, M.D., Surgeon General of the United States Public Health Service to the State Health Commissioner, stating in part that the role played by the National Institute of Health "does not justify the Public Health Service in making an 'unqualified statement' with respect to the vaccine". Dr. Scheele further stated: "The vaccine is an experimental product whose manufacture has not been licensed. Information which would be required for the issuance of a license is not yet available and is dependent on further laboratory and clinical experience."

April 16—Copies of the Health Commissioner's letter of April 14, along with the supporting documents, were mailed to members of the Executive Committee of The Council. The Chairman of The Council sent a telegram to all members of the Executive Committee, asking them to telegraph by Monday, April 19, their recommendations on whether MSMS should approve, approve with reservations, or disapprove (the) mass inoculation project".

April 19—In a statewide telecast reaching those counties scheduled to participate in the field trials, the Chairman of The Council spoke directly to the people of Michigan, outlining the MSMS decision as determined by the poll of the Executive Committee. He stated that MSMS would "not withhold approval from the experiment" and would defer to the decision of the State Health Commissioner. He emphasized, however, that the undertaking: (1) must be recognized as "mass inoculation of selected children as part of a scientific experiment" and not "mass immunization"; (2) should not by-pass the prerogative of the family physician to determine what type of, or when, preventive inoculation should be administered to a child under his care, and (3) should provide for access to vaccination records by family physicians of children involved in the test. He also invited attention to the timing of the experiment pointing out that it might collide with the onset of the poliomyelitis season; however, timing was held to be within the domain of public health officials for decision. Since the last telegram in the poll of Executive Committee members was not received until shortly before broadcast time, the final wording of the MSMS position could not be prepared in time for the telecast.

April 22—MSMS presented its final position in a letter to the State Health Commissioner. In a covering letter accompanying this decision, the Chairman of The Council explained: "The reservations set forth have been made necessary because the answers of your advisory committee to questions put by the Michigan State Medical Society, while reassuring, are not *fully* satisfactory to us. Without these reservations the individual doctor of medicine becomes responsible for the safety of experimental materials over which he has no control."

The final decision of MSMS, directed to the

(Continued on Page 558)

Handmaiden to Maternal Assassins

By Norman F. Miller, M.D.
Ann Arbor, Michigan

A HALF century ago, and again a quarter century ago, the maternal mortality figures from many nations revealed the embarrassing fact that the United States of America was by no means the safest place in which to have a baby. With reluctance, we had to admit that something was wrong. Our care of potential mothers was not what it should be. The epoch-making events that transpired during the intervening years constitute golden chapters in obstetric history. Partly because the spotlight of inquiry was focused upon obstetrics, and, even more, because of a gradual improvement in understanding, better obstetric education for patients, for medical students and physicians, improved facilities, antibiotics, availability of blood and many other reasons, the risks incident to pregnancy and childbirth have undergone a tremendous decline. While available statistical evaluations are notoriously inaccurate they do serve to indicate the trend. Thus, from the fantastic figures of 1903, the maternal mortality in the United States dropped to less than one (0.9) per 1,000 live births in 1951. This decline was the result of nationwide improvement and it is impressive. It is both gratifying and relaxing to know that for the wives, daughters and granddaughters of today having a baby is a much safer business.

We find comfort in this knowledge, and rightly so, but there can be no resting on oars. Letting down now could lead us into the medical doldrums, a static state of dry rot, where we fall for the philosophy of irreducible minimums. Indeed, the thought that maternal mortality has approached this eutopian status has been incubating for some time. A survey in the State of Minnesota revealed a death rate for 1941 of 2.0 per 1,000 live births. At that time the hope was expressed by the survey committee that it might be possible in ten years to reduce Minnesota's maternal mortality to 1.0 per 1,000 live births, *then considered the irreducible minimum.* Five years later, in 1947, Minnesota's rate was 0.6, the lowest in the United States for that year. In 1951 the rate for Minnesota was reduced to 0.3 per 1,000 live births and Minnesotans do not accept this as "an irreducible minimum." Nor should they do so, for in the same year both Connecticut and Oregon (in 1951) reported rates of 0.1 per 1,000 live births, in other words one maternal death per 10,000 live births.† In 1951 Michigan reported a rate of 0.54 and the rate of the whole U.S.A. was 0.76 per 1,000 live births.*

Reduction in maternal mortality did not occur suddenly. It represents a progressive decline over a long span of years and the goal has not yet been reached.

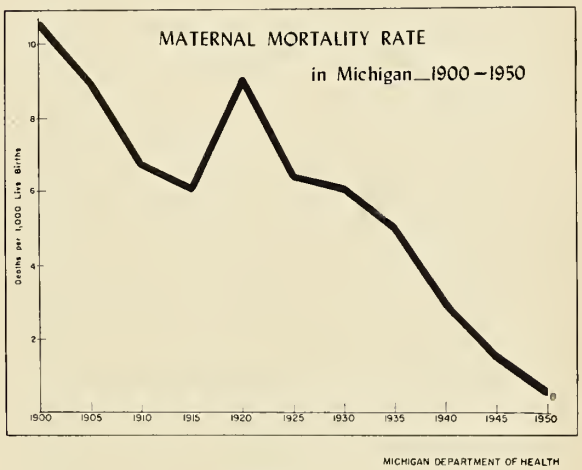


Fig. 1.

In our own State of Michigan the decline in maternal mortality has also been impressive. This is emphatically shown in Figure 1, taken from a report on Maternal, Infant and Childhood Mortality for 1950 prepared by the Maternal and Child Health Section of the Michigan Department of Health. In 1900, Michigan had a population of approximately 2,500,000 and 43,699 live births. During the same year there occurred over 450 maternal deaths, an incidence of 10.4 per 1,000 live births.** By 1952 Michigan had a

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Presented at the Fourth Annual Lecture Program of the Clara Elizabeth Fund, Flint, Michigan, October 7, 1953.

†Minnesota Maternal Mortality Surveys by A. B. Rosenfield, M.D., M.P.H., Director, Division of Maternal and Child Health, Minnesota State Department of Health, Minneapolis, presented before the Maternal and Child Health Section of the American Public Health Association, Cleveland, Ohio, October 23, 1952.

*Data obtained from the Maternal and Child Health Section, Michigan Department of Health, Lansing.

**A book of charts on Maternal, Infant and Childhood Mortality, Michigan, 1950. Maternal and Child Health Section, Michigan Department of Health, Lansing.

population of almost 7,000,000 and nearly 180,000 live births.* There were "recorded" only eighty-two maternal deaths for that year, an incidence of 0.5 per 1,000 live births. Although this incidence is not quite correct, being lower than the facts will ultimately reveal, it, none-the-less, represents a tremendous decline in the risk of becoming a mother. In Michigan, over a period of fifty years the actual number of maternal deaths decreased from 452 in 1900 to approximately eighty-two in 1952. This despite the fact that there were over four times as many births in 1952. What better evidence of improved maternal care could one wish for? Progress indeed! But, paradoxically as it may seem, it is still recorded both in terms of lives saved and tombstones. This fact must be remembered, for we are not entitled to rest on the laurels of our predecessors. It is not my wish to detract from, or to minimize progress already made. I have no wish to disturb medical conscience or lay peace of mind. But, I do ask you to open your eyes to the tombstone side of this story. Careful examination of this less publicized cobwebby side shows that despite the recorded cause of death, be it toxemia or hemorrhage, there was generally another silent partner in on the kill. Though seldom evaluated, this evasive, double-dealing interloper frequently spelled death when the thread of life was weakened by other causes. Familiar to us all, but seldom recognized, this maternal assassin is the one most amenable to medical control. We must recognize and expose this seldom named arch enemy which is commonly garbed in the form of "too little too late," "poor judgment" or just plain "incompetence." In any form this handmaiden is a dangerous killer.

At the turn of the present century maternal deaths were attributed principally to (1) infection, (2) toxemia, and (3) hemorrhage. Throughout the years these causes have retained their unenviable reputation, although today hemorrhage heads the list, with toxemia playing second role. Infection, the one time leader, has been demoted in rank, thanks to asepsis, antibiotics and many other reasons.

Toxemia remains an enigma despite worldwide research. In Michigan toxemia is responsible for approximately 20 per cent of maternal deaths. The chief cause is hemorrhage. In one form or another excessive blood loss underlies or is directly responsible for over 40 per cent of maternal deaths.‡ Other important causes, especially embolic phenomena and infection, should be prominently listed, yet none—no not one—is more deserving of our attention than this handmaiden to maternal assassins—whatever its guise may be.

Because it plays an important role I should like to discuss it, and in doing so I am not unmindful of the difficulties involved. Statistical evaluation of maternal deaths are inaccurate and do not always give us the true cause. How can it be otherwise? Away from the immediate environment of emotional stress, far from the tense atmosphere of the fatal complication, it is sometimes difficult to rightly assay the death dealing factors. Such things as the availability of help, the quality of environmental facilities, individual capability and obstetrical judgment are but a few of the intangibles—threads by which life is suspended in the presence of serious complications. These make difficult the task of weighing procrastination, faulty judgment and incompetence as factors in maternal mortality, but, they must not blind us to their shadowy presence.

Attempts to catalogue the causes of maternal death have been going on for a long time. The incompleteness and inaccuracies inherent in reports based on such data are well known and are difficult to avoid. As a consequence few maternal mortality reports are complete and still fewer attempt to evaluate preventability. In 1933, a noteworthy exception appeared in the form of a report by the New York Academy of Medicine on Maternal Mortality in New York City.† The New York report was based on 2,041 maternal deaths occurring during the years 1930-1932. Two-thirds (1,343) or 68 per cent, for one reason or another, were considered preventable. Of this number, 60 per cent "could have been avoided" and were attributed to incapacity of the attendant; lack of judgment, lack of skill or careless inattention. This report is now twenty years old. Many changes have occurred since it was prepared, but faults of omission and commission are still with us. One need only take a look at the tombstone side of the story as told by two of the major killers, toxemia and hemorrhage, to confirm this fact.

The mystery disease of obstetrics—toxemia—is

*See footnote on Page 539.

‡Estimates based on maternal deaths in Michigan for years 1950, 1951 and 1952.

†Maternal Mortality in New York City. The Commonwealth Fund. New York: Oxford Press, 1933.

responsible for about one-fifth of the maternal deaths in this state. Probably sixty per cent of these toxemia deaths are preventable. In 32 per cent, the responsibility appears to have been that of the patient and her family (failure of co-operation). In the other 68 per cent the responsibility appears to be on the medical side of the ledger.‡ Most physicians are alert to the hazards associated with toxemia. However, some appear to underestimate the seriousness of these diseases. How else can we account for the obvious part played by the "handmaiden" in fatal cases. The toxemia death records include many examples of points I wish to make, namely:

1. Major maternal assassins seldom strike alone.
2. The handmaiden—here discussed—is commonly the straw that breaks the camel's back.
3. Some maternal deaths are preventable.
4. We can do something about it.

The latest national figures show that mortality from toxemia decreased approximately 71 per cent during the ten-year period 1939-1949.§ In Michigan, during the ten-year period 1940-1950, the death rate from this cause decreased only 50 per cent. This improvement is good and may tend to blind us to the fact that many women still die from toxemia and unnecessarily so. In searching for the reason it appears that unfamiliarity with basic principles of management continues to be an important factor. These cardinal principles are important enough to warrant their simple restatement at this time.

The normal pregnant woman does not reveal sudden gain in weight (edema), albuminuria, or hypertension. Consequently the presence of one of these signs calls for more frequent prenatal visits. The presence of any two of these signs means the patient is in danger and must be carefully observed. The presence of all three signs is like a siren urgently calling for action. A patient so afflicted must be hospitalized for rest, study and treatment. A good response may warrant discharge in a few days under close scrutiny. A poor response, as evidenced by progressive increase in the severity of her signs and symptoms calls for consultation and, in many instances, termination of gestation. These things are about as axiomatic in the practice of obstetrics as is pressure on the brake when stopping a car. Yet, despite these basic principles, women die because these axioms are ignored. A composite example might go somewhat as follows:

> A thirty-year-old married gravida III, para II white woman reported for care early in pregnancy. Her height was 5 feet, 6 inches, weight 140 pounds, blood pressure 110/80 and urine negative on this first of nine prenatal visits. At the sixth month of gestation her blood pressure rose to 150/90. From this time on each urinalysis was positive for albumin. By the seventh month of gestation the patient was edematous, her weight being 163 pounds, blood pressure 170/90 and the urine four plus for albumin. Despite these urgent and alarming signs, no definitive action was taken until one month later when the patient developed convulsive seizures and was admitted to the hospital. Now, much too late, labor was induced and after eight hours of desultory contractions, delivery of a dead infant was accomplished by version and extraction, following which the patient went into deep shock and died. Result—a dead infant, a dead mother, a broken home—all charged to toxemia of pregnancy.

In this case the handmaiden had a veritable field day. Disguised in such costumes as procrastination, poor judgment and too little too late, it played a stellar role in the death of this woman and her child.

The defects in the management of this case are so obvious as to require no comment.

If the use of this "composite" example disturbs you, let me hasten to say that the death records contain equally "unlikely" reports. To burden you with their recitation would serve only the useful purpose of reiteration, for they illustrate the same common errors, namely:

1. Failure to take seriously the early signs and symptoms of this highly volatile disease.

2. Failure to recognize that our strongest weapon in combating toxemia during pregnancy *still* lies in early recognition and, when unresponsive to treatment, in termination of pregnancy BEFORE the situation has become untenable.

A few moments ago, I stated that the unresponsive toxemia may require termination of pregnancy. It is not possible to discuss this in detail at this time but it is too important to be completely dropped. The choice of time and method for termination is often a vital matter. Consequently, it is well to have considered this eventuality long before the need arises. It is well to keep in mind the following points:

1. Patients must be individualized since much depends on the duration of gestation, parity, condition of the cervix, position and size of the infant and rapidity with which the disease is progressing.

2. Don't wait too long. Don't delay interruption until haste becomes another hazard jeopardizing the lives of both mother and child.

§U. S. Children's Bureau, Statistical Series, Number 15.

3. When the above precautions are observed cesarean section is seldom necessary but, should good judgment point to section as the proper method for a given case, then do not hesitate. Let neither talk about conservatism nor chatter about section incidence interfere. Properly indicated, a well-timed section may be the most conservative method of termination. Furthermore, a toxic patient who fails to respond to treatment is in danger of losing her life. We would not hesitate to recommend laparotomy for a suspected acute appendix. Why, under such urgent circumstances, should we hesitate to perform a properly indicated laparotomy for fulminating toxemia? Patients are just as dead from fatal toxemia as from a ruptured appendix.

It would be incorrect to leave the impression that the "handmaiden" accompanies only the toxemias. This boon companion to all major killers appears to achieve its greatest success in teaming up with hemorrhage. Over 60 per cent of maternal deaths due to hemorrhage are probably preventable. If we eliminate ectopic deaths the preventability rises to over 70 per cent.[4] As stated earlier preventability and the parts played by delay, faulty judgment, environmental shortcomings, et cetera, are sometimes difficult to evaluate. Appraisal must be undertaken with care. It is best done by those with knowledge of the innumerable factors, stresses and strains which influence the outcome of any emergency.

While management of toxemia is largely an individual physician's matter the control of hemorrhage depends also upon the facilities offered by hospitals. But, in last analysis the availability of equipment and facilities are determined by the planning of the physicians themselves, so even this remains our responsibility.

Because hemorrhage commonly strikes suddenly, its management can be an especially serious problem. Who amongst us—at some time or another—has not felt the cold, spine tingling chill of death as he struggled to stem the flow of life essential blood? Who amongst us after such experience has not resolved to be better prepared for the next similar emergency? Yet, despite good intentions, despite the high incidence of hospital deliveries, the greater availability of blood and blood substitutes, women continue to die unnecessarily from this cause. This is today, the most common reason for maternal death. Why? Before we look for the answer to this question let's listen to a few brief hypothetical examples of what sometimes happens.

A woman, thirty-nine years old, gravida XII, para X, was admitted to a hospital at thirty-six weeks of gestation, not in labor, but bleeding and in mild shock. A diagnosis of probable placenta previa was made. The patient was given 500 cc. of plasma and additional glucose solution intravenously. No other definitive treatment was carried out. Since blood was not available none was given. Five hours later the patient died of blood loss and shock—undelivered.

Inadequate hospital facilities, lack of assistance and just plain human inertia are also familiar disguises for the treacherous handmaiden as they were in this case.

A woman, thirty-two years old, gravida III, para II, was admitted to a hospital at term and in labor. Four hours later bleeding occurred but vaginal examination revealed no placenta previa. However, the cervix was found to be 5 cm. dilated and the occiput presenting. A manual dilatation of the cervix followed by version and extraction resulted in the delivery of a dead infant and postpartum hemorrhage. The uterus was promptly massaged and packed. Exploration was not carried out. Ergotrate, 500 cc. of whole blood and glucose solution were given but the patient died of hemorrhage and shock three hours later.

Adept at quick change, the handmaiden here participated in the form of poor judgment, overzealousness and too little too late. These tragic stories of the handmaiden's activities were written in blood.

Similar case histories may be found in our maternal death records.

Glaring examples of this sort are by no means common. In retrospect, the mismanagement would certainly be recognized by the attendant. The same cannot be said for the more common, but less apparent shortcomings contributing to hemorrhage deaths. Because of lack of knowledge, insufficient training and less striking evidence of mismanagement the attendant may not recognize his failures of either omission, commission or both. It is in this area that we still find a serious weakness.

The examples presented serve to pin-point some common errors in the chain of events which lead up to hemorrhage and its inadequate control. For the sake of emphasis and brevity these may be listed as follows:

1. Failure to appreciate that serious hemorrhage can sometimes be avoided by anticipation and appropriate management.

2. Failure to remember that hemorrhage may strike anytime. That good obstetric care demands adequate provision to meet this complication whenever it arises.

3. Inadequate hospital standards. Failure on the part of some so-called hospitals to provide

minimum facilities and equipment with which to combat these emergencies. This matter of the substandard hospital is a serious one. It presents many well-known facets that have not yet been solved. Furthermore, this deficiency is not confined to the small institution with its understandable problems.

4. Faulty judgment which leads to use of untimely operative procedures in the absence of justifiable indications and without the necessary skill, assistance or preoperative preparation.

5. "Buck fever." A tendency on the part of the attendant to "freeze" after the initial and sometimes inadequate attempt to stem the bleeding has been carried out.

6. Limited therapeutic repertoire. Sometimes uterine massage, drugs and packing represent the total armamentarium. The familiar too little too late epitaph.

7. Failure to provide and give an adequate amount of blood, or when this is not available, of suitable blood substitute.

Obstetric hemorrhage, in one form or another, is still a highly fatal complication—especially when accompanied by the handmaiden—too little too late. To conquer this major cause of dead mothers each and every one of us must re-evaluate our combat knowledge and requirements. Let's make certain the next maternal death does not occur for the want of precaution; inadequacy of emergency equipment, nor for the lack of full measure treatment. In our care of the obstetric patient let's be sure there is no room for the shadowy and treacherous handmaiden to maternal assassins.

These tombstone observations are not pleasant nor are they easy to take at a time when the quality of obstetric care has presumably reached an all-time high. But they are facts and they cannot be ignored.

There is reason, however, to be hopeful. In several states, and Michigan is one of them, thorough maternal mortality study programs are in progress. There is reason to believe that review of factual data thus made available will uncover therapeutic ropes of sand and permit the inauguration of enlightening educational and other corrective measures.

ANNUAL MAY CLINIC—INGHAM COUNTY MEDICAL SOCIETY

The 26th Annual May Clinic of the Ingham County Medical Society was held at the Hotel Olds, Lansing, Michigan, on May 6, 1954.

The afternoon program consisted of the following four papers:

Emmerson Day, M.D., Memorial Center for Cancer and Allied Diseases, New York, Director of Strang Cancer Prevention Clinic. Subject: "Cancer Detection."

Joseph A. Farrow, M.D., Memorial Center, New York. Subject: "Differential Diagnosis of Lesions of the Breast."

Michael J. Jordan, M.D., Memorial Center, New York. Subject: "Importance of Early Diagnosis and Adequate Treatment of Cancer of the Uterus."

Lewis M. Hurxthal, M.D., Lahey Clinic, Boston, Massachusetts. Subject: "Diagnosis and Treatment of the Adrenal Glands."

A social hour and dinner was followed by an address by Cornelius P. Rhoads, M.D., Director, The Sloan-Kettering Institute for Cancer Research, Memorial Center, New York. Subject: "Frontiers in Cancer Research; Progress Towards the Chemotherapeutic Control of Neoplastic Disease."

Symposium Highlights Medical Science Building Dedication at Wayne University

By Charles A. Lewis
Administrative Assistant, Wayne University
Detroit, Michigan

"MEDICAL and Pre-Medical Education" was the subject discussed at a symposium which was the highlight of Dedication Day for the Medical Science Building at Wayne University, May 11, 1954.

Prior to the symposium, the building was dedicated in a program in which persons prominent in city and state government (including Mayor Cobo and Governor Williams) and in the medical profession participated.

Events of interest to Michigan's physicians continued to be featured on the evening of Dedication Day and the day following (May 12).

Highlight of Dedication Day evening was a testimonial dinner honoring Dr. William J. Stapleton, Jr., as "Michigan's Foremost Family Physician for 1953" and also as a scholar and teacher. The dinner was sponsored by the Michigan State Medical Society, the Wayne County Medical Society, and the Wayne University College of Medicine Alumni Association.



The newly dedicated Medical Science Building stands east of the other medical training buildings and of Detroit Memorial and Receiving Hospitals.

Participating were four persons who have made recent outstanding national contributions in the medical education field. They were: Dean Joseph Hinsey, Cornell University College of Medicine (chairman); Dean Joseph Wearn, Western Reserve University School of Medicine; Associate Dean Aura Severinghaus, College of Physicians and Surgeons, Columbia University; and Dr. John Deitrick, Professor of Medicine, Jefferson Medical College of Philadelphia.

The Annual Alumni Clinic Day, on May 12, was climaxed with a banquet at the Hotel Fort Shelby.

In the new Medical Science Building, every feature has been designed for optimum teaching facilities at lowest cost.

Suggestions from medical school staffs throughout the country were incorporated into the building plans to achieve maximum utility. At the same time, beauty of design was not forgotten.

The new structure will provide physical facilities to permit enrollment increase from the present level of about 260 students to a new maximum of 400. Michigan's need for doctors, long recognized by Wayne, by Michigan legislators, and by health and education groups in the state, brought the concerted effort that led to breaking of ground for the building in 1951.

Built with a $3,550,000 state grant and almost $900,000 from local sources, the building will supply long-needed lecture halls and laboratory facilities for the school.

The gray brick structure of eight stories has been in partial use since last autumn and will be in complete use next fall. Architects of the building are Smith, Hinchman and Grylls.

The eight-floor height and the shape were adopted in order to harmonize staff and student needs with land availability. Height and shape, combined, have also provided all office and laboratory rooms access to outdoor lighting.

Through imaginative handling, functional needs have been synthesized into a pleasing design. On the exterior, decorative effect has been achieved with alternating bands of buff brick and gray metal, the latter flanking extensive window-glass area. A dark slate strip along the bottom of the building completes the simple exterior design.

In the interior, 141,000 square feet of floor space have been provided, every foot possible being devoted to direct student and faculty use without sacrifice of decorative effect.

In planning lounge areas, special attention was given to the crowded time schedules of medical students. Lounge areas were made accessible on all the floors most used by students so that their brief periods of free time may be used to greatest advantage. The areas themselves, flanking the elevators, are simply enlarged portions of main corridors.

Consideration was also given to the students' long periods of confinement indoors. It appeared desirable, because of such confinement, to incorporate some feature that would take the students into fresh, outdoor air when weather permitted.

The feature decided upon was an outdoor dining patio overlooking a landscaped area. This is accessible from the cafeteria and may be used through a considerable portion of the year. This feature was accomplished without additional cost, since the concrete floor of the patio is the roof of the transformer room.



An outdoor dining patio is accessible from the building's cafeteria and may be used by students on pleasant days.



Lounge areas are located at elevator entrances on six of the floors.

The Crushed Hand

By Michael L. Mason, M.D., F.A.C.S.

Chicago, Illinois

THE crushed or severely mangled hand presents a complicated problem of repair. The surgeon must salvage a functional unit, often from a seemingly hopeless tangle of torn and crushed tissues. He must not assume too hastily that salvage is impossible nor, in his zeal to retain important structures, should he fail to remove hopelessly injured tissues to the serious jeopardy of his whole efforts.

The general principles of care of the crushed hand differ in no way from that for other open wounds, but their application is often difficult. In brief, the hand should be carefully cleansed, hopeless tissue excised, sacrificing at this time no living tissue and then reconstructing from what is left the maximum of a functioning member possible. Obviously, no two cases will be the same, no routine can be established applicable to all cases, and only broad general principles can guide the surgeon.

Complicated tendon repairs are seldom feasible in these injuries. The surgeon's efforts are directed essentially toward nerve continuity, reducing fractures, placing the hand in the position of function so that the two major motor functions of the hand—pinch and grasp—may be retained or eventually restored, and securing closure by any one method or combination of methods. The minimum aim at the initial operation is to secure primary healing of the hand in the position of function, covered with skin, and with nerves repaired. Anything further that can be accomplished initially with reasonable assurance that primary healing will not thereby be disturbed, is permissible. But if the surgeon is to err, it is better to err on the side of omission rather than commission. It is so important to secure primary healing in the position of function. If this is secured, further reparative surgery is possible in the hand with the minimum of fibrosis, and in a position favorable for further surgery. Extensive reparative primary surgery, in tissue already badly handicapped by the original trauma, may wreck the patient's only chance for a functioning hand. Late reconstructive surgery is always possible; however, this should not have to be an attempt to correct errors in primary care which may often be irreparable.

First aid in these injuries is the same as for other open wounds: simply cover with a voluminous sterile dressing, bandage on snugly to control edema and hemorrhage, and apply a simple splint. Nothing further is done to the hand until the patient reaches a properly equipped hospital and competent surgical care. Exposure of the wound to numerous examinations, uncovering without taking precautions to prevent droplet contamination must be avoided. The wound is accorded the same aseptic handling that is given any clean operative wound.

A careful history is essential. The time of injury is ascertained and also the nature of first aid and any subsequent care, since the surgeon must estimate the possibility of secondary contamination. It is very important to know the exact cause of the wound, since from this is secured information concerning the degree of devitalization of tissues and also the likelihood of serious primary contamination. The nature of the injury is of great significance in the primary care. Knowing this, the surgeon can judge the degree to which the tissues have been devitalized and can judge his excision accordingly. For example, it may not always be easy to judge viability of tissues and if the surgeon knows how severely crushed the hand has been, he can gauge excision accordingly.

Examination of the patient includes not only the wound itself (done under aseptic precautions) but of the patient as a whole, to rule out other injuries which might require priority care. Blood and urine tests are of course carried out. It is well to inquire as to the last meal, since with a general anesthetic which is usually required, aspiration of vomitus may occur. Preliminary gastric lavage may be indicated. X-ray examination of the hand is always indicated, even though the fracture situation may seem perfectly evident.

Care of the wound, under a general anesthetic and in a bloodless field secured by means of a sphygmomanometer (280 mm. Hg) is carried out in the operating room. The surrounding area and then the field itself is carefully washed with soap and water (10 to 20 minutes) and thoroughly irrigated with physiologic saline solution. Then, with a change of gown and gloves, the surgeon proceeds with excision of the wound. This con-

From the Department of Surgery, Northwestern University Medical School, and Passavant Memorial Hospital, Chicago.

Read before the Michigan State Medical Society, 88th Annual Session, Grand Rapids, September 24, 1953.

sists in removing by sharp dissection all tissue destined to necrosis. At this stage, no viable tissue is sacrificed even though the surgeon may feel that it will eventually be useless. The object of this excision is to remove all necrotic tissue so that when the decision as to extent of permissible repair is made all tissues on which this judgement is made are capable of survival. In other words, the surgeon can say to himself, "This is what I have," and "What sort of hand can I construct with what is left?"

Judgment as to viability may be very difficult and can be secured only by experience. Most often the error in excision is made in the case of avulsed skin flaps, which are usually not viable, but the removal of which creates a great defect. Excision of skin edges in sharply cut wounds is seldom required, but crushed skin is more often than not nonviable, often because of thrombosis. Detailed discussion as to excision of various tissues is scarcely feasible in this brief outline; however, the surgeon soon learns that the most valuable criterion of viability is bleeding from cut edges and contractility in the case of muscle. It must not be forgotten that even tiny bone fragments, if they are connected by even the smallest shred of connective tissue, are usually viable and may be very valuable in later reduction of fragmented fractures.

Amputations are undertaken during the phase of excision only if the finger is completely without blood supply, and even here much of the skin is saved for possible use in coverage later on. Amputations of digits because of impossibility of later restoration to function is considered only after the initial phase of excision is accomplished. There are many considerations that come to mind when a viable finger is amputated. Over and above all, must be remembered that it is always possible to amputate later, after a trial of labor. Also one is hesitant to remove even an obviously hopelessly functionless finger if that happens to be the only digit left or if several other fingers are badly damaged. The thumb of course is awarded special consideration and all efforts are directed toward saving every possible bit of it for reconstruction.

Excision accomplished, the surgeon applies compression with moist sponges and releases the blood pressure cuff. After several minutes, the hand is inspected and bleeders not caught during excision are ligated. Skin and other tissues which show themselves to be nonviable can be detected at this time and are excised. The blood pressure cuff is again inflated and reconstruction of the hand is undertaken as far as conditions permit.

There are, as I see it, four musts in the initial reconstruction: (1) repair of divided nerves; (2) reduction of fractures; (3) molding of the hand into the position of function; (4) primary closure of all wounds by whatever means is feasible.

Certain tendon repairs may occasionally be undertaken in the badly crushed wound. The extensors over the back of the hand or fingers may be approximated if adequate skin coverage can be secured. The flexor tendons are best left unrepaired since they are certain to become adherent and require replacement later. Nerves, on the other hand, should be accurately approximated with fine (6-0 or 7-0) silk. It is too often assumed that the digital nerves are too small for repair. Such of course is far from the case and they regenerate so well when repaired that the results are most gratifying. Over and beyond any satisfaction that the surgeon may derive is the consideration for the patient whose sensitive skin is necessary to his use of the hand.

An adequate and stable framework for the hand is difficult to reconstruct if the opportunity for fracture reduction is missed at initial operation. At this time all fractures can be reduced by simply molding the hand into the position of function over a suitable splint. Traction is seldom needed and in the severe crushes one hesitates to use internal fixation. Molding over a splint in the position of function makes it possible for the surgeon to apply a compression dressing at the end of the operation, and this we feel is of great importance.

It is hardly necessary to discuss at length the need for immobilizing in the position of function or for getting the hand into this position. The more experience I have had in surgery of the hand and in correcting badly damaged hands, the more importance I have come to attach to securing the position of function right from the start. So many vicious contractures are prevented, stiffening of joints in extension or in extreme flexion, malposition of the thumb, and wrist, angulation of fractures could be prevented if only the hand were initially placed in the position of function. Even a very modicum of motion is valuable if the fingers and thumb are placed in the grasping position.

Closure of the wounds is likewise a must and although it may seem almost an impossibility, the

surgeon has at his disposal a great variety of methods which singly or in combination can be used for closure. Suture is the best if hand skin is available and here the surgeon will be happy to have saved tags and irregular flaps and to have filleted fingers whose skin can be dovetailed into defects to secure closure. The split thickness skin graft, removed in pieces varying in size from a postage stamp to 4 or 5 inches square is a most valuable source of coverage. When bone, joints or bare tendon must be covered over, a flap of skin and subcutaneous tissue carrying in its own blood supply is needed. The rotation or sliding flap is excellent in such cases, if it can be used, since it does not require the hand to be applied to the abdomen and enables the surgeon to place the hand in the position of function under a compression dressing. The bed from which this flap is taken may be covered by a split graft. When it is absolutely necessary however a pedunculated flap from the abdominal wall should be used to secure coverage.

The operation is completed by the application of a compression dressing. This is applied before the blood pressure cuff is finally released. We consider the compression dressing to be a vital part of the operation and not to be turned over to untrained personnel to carry out. It is the part of the surgeon's job to apply this dressing just as it is his job to carry out the other steps of the procedure. With the hand on a properly padded splint, gauze is placed between the fingers, the thumb is well padded with fluffed gauze to keep it in proper position and then the whole hand covered with voluminous amounts of fluffed gauze and abdominal pads. This whole is then bandaged firmly with woven elastic bandages. Great care is taken to make the pressure even and non-constrictive. This firm but even support helps minimize swelling and edema, controls fine capillary oozing (*not* hemorrhage from small arteries—these should have been ligated), promotes venous drainage, obliterates dead spaces and helps to immobilize the hand. Only after the compression dressing is applied is the blood pressure cuff finally released.

Postoperatively, the hand is kept elevated on a pillow at heart level when the patient is in bed. As soon as he is allowed up—usually the next day—the arm is carried in a sling. Dressings are changed on the fifth to eighth day and the compression reapplied. In the absence of fracture or tendon repair requiring relaxation the splint is discontinued on the tenth to twelfth day and if healing has taken place by primary intention the patient is encouraged to start the use of the hand. Warm soapy washing of the hands is most valuable in encouraging use and promoting circulation.

It is impossible to go into all the variables which go into the operative care, after care and staged operations which management of the crushed hand may demand. I have tried only to stress the most important general principles which underlie the initial care. These are early care under adequate operating conditions with no preliminary tampering, careful mechanical cleansing with soap and water, excision of tissue destined to necrosis, deep repair of nerves and reduction of fractures; tendon repair only in the exceptional instance, closure of the wound at first operation, molding of the hand on a splint in the position of function under a compression dressing. With this start the crushed hand has the maximum chance of functional return within the limits imposed by the destruction of the injury.

AMA INAUGURAL CEREMONY TO BE BROADCAST JUNE 22

The inaugural ceremony at which Dr. Walter B. Martin, Norfolk, Virginia, will be installed as the 108th president of the American Medical Association will be broadcast over a nationwide radio network on Tuesday, June 22.

Originating at 7:30 p.m., Pacific Coast Daylight Saving Time, (10:30 p.m. Eastern Daylight Saving Time) from the Palace Hotel in San Francisco, the program will be carried by more than 340 stations of the American Broadcasting Company's radio network. This will be the fifth consecutive year an AMA president has addressed the nation on the night of his inauguration.

This year, for the first time, the ceremony also will be televised by a local station. KGO-TV will carry the program to television viewers in the San Francisco area.

In addition to Dr. Martin, other AMA officers who will appear on the radio and television broadcasts are: Drs. Dwight H. Murray, Napa, California, chairman of the board of trustees; Edward J. McCormick, Toledo, Ohio, outgoing president, and James R. Reuling, Bayside, New York, speaker of the house of delegates.

Management of Vascular Headaches

By Mason S. Maynard, M.D.
John R. Pedden, M.D.
Grand Rapids, Michigan

DURING THE PAST twenty-five years over 200 articles have appeared in medical journals pertaining just to headache. The result of this clinical research has been that the average clinician understands the headache patient and his problems and can provide symptomatic relief in a vast number of cases. However, there are still 10 to 15 per cent who cannot obtain relief from drugs and it is this group of patients that we shall concern ourselves with in the following paragraphs.

Examination

Our usual office procedure includes the following:

1. Careful history taking—Many times thorough investigation of the patient's background will reveal an emotional problem which acts as the trigger mechanism for the headache attack. By careful examination of the emotional status, we can in many instances, reduce the number of headaches by helping the patient cope with his problems.

2. Laboratory methods including skull x-rays to rule out tumors; cervical spine x-rays; blood chemistries; blood counts and urinalysis; all of which help to exclude headaches due to infections and other causes.

3. Neurological examination.

4. Fundoscopic examination and testing of extraocular response to light.

These tests are particularly helpful in determining whether or not the headache is of the vascular type, i.e., it is produced by vasodilatation of the cranial vessels.

Treatment

Wolff[10] showed that increased amplitude of pulsation of certain cranial arteries, particularly branches of the external carotid, will produce severe head pain. He showed that ergotamine tartrate will reduce this vasodilatation and thus abort the head pain. Ergotamine tartrate (Gynergen-Sandoz) has been employed by us to symptomatically treat such vascular headaches. Others have reported its value.[1,5,9]

(a) If the patient appears to have a severe attack during an office visit, we attempt to abort the attack with 1 cc. ergotamine tartrate intramuscularly or with 1-2 cc. dihydroergotamine (DHE 45-Sandoz) intravenously. We find that this dosage is usually sufficient to produce relief. If the attack has proceeded to the third stage—that of edema of the cerebral blood vessels—then larger doses are often necessary to produce relief.

(b) For subsequent attacks, patients are advised to take two tablets of Cafergot (Sandoz) at the earliest signs of an attack. Many of these vascular headache patients have an aura and are able to determine, often on arising, whether or not they are going to have an attack that particular day. When aura occurs, the patient should be advised to take two tablets of this caffeine-ergotamine mixture immediately. After the headache has already started, but is not fully developed, the patients are instructed to take two tablets and to follow this up every thirty minutes with an additional 2 tablets until a total of 6 or 8 has been taken. The literature stresses the importance of taking this preparation early, i.e., before the vessel walls become edematous and therefore unable to contract.[3,4,6]

We stress to our patients that they should not take their medication three times a day regularly. Cafergot is only effective when the vessel has been "sensitized," i.e., it is either constricted as it is in the aura phase or dilated as in the headache phase.

(c) In some of our patients the headache can be aborted by intramuscular ergotamine tartrate or by oral Cafergot. However, the effect is inconstant since these patients may vomit severely or more often complain of extreme nausea which makes retention of medication difficult.

(d) We have employed dihydroergotamine, 1-2 cc. intramuscularly when nausea and vomiting occur. Both this preparation and ergotamine tartrate must be administered hypodermically and it is difficult to instruct or get the patient to self-administer these medications. They often wait in the hope that the attack will pass or try to reach the physician. Frequently their headache has proceeded to the edematous stage and is difficult to abort.

(e) Recently, there have appeared articles on

the use of a combination of ergotamine tartrate and caffeine alkaloid in suppository form.[2,7,8,11] These investigators observed that the suppository was particularly effective in those patients who presented dominant symptoms of nausea and vomiting. They also concluded that the suppository was effective when other medications had failed to produce desired relief.

We employed this medication in several cases and are reporting two typical case histories.

Case 1.—Mrs. B. R., age fifty, housewife and office employe, had had migraine headaches for many years. The headache usually occurred with her menstrual periods, but also occurred often after emotional disturbances. Onset was gradual with photophobia and sensitivity to bright light. At its peak it was a pulsating pain over the entire left side of the head. Before obtaining medical relief, the headache could last from several hours to a day or two. Physical examination and laboratory tests were within normal range. A skull x-ray was reported to show "benign hyperostosis frontalis interna." *Treatment.*—This patient always obtained satisfactory relief from injections of ½ cc. DHE 45 intravenously or subcutaneously. Cafergot tablets helped if the patient did not vomit. She also obtained relief with the ergotamine-caffeine suppositories, taking one suppository every half hour for a total of three suppositories. In time she found this dose to produce vomiting and obtained adequate relief by taking ½ of a suppository each time.

Case 2.—Mrs. M. B., age forty-three, housewife, had migraine headaches many years. These occurred mainly at the time of menstrual periods but also during times of excitement. The onset would be sudden and the pain located mainly in the right occipital area, though it could involve both sides of the head. It was a pulsating severe pain usually with nausea and vomiting. Occasionally it could last three days. Physical examination and laboratory tests were normal. "Benign hyperostosis frontalis interna" was again reported on the skull x-ray. *Treatment.*—The patient had usually vomited after taking Cafergot tablets. A 1 cc. injection of DHE 45 usually helped if given soon after the headache started. Ergotamine-caffeine suppositories were given at half hour intervals for 2 doses. Relief was obtained comparable to injections of DHE 45. No intolerance was noted.

Summary

Two patients with long-standing migraine headaches have been studied. Both developed vomiting from oral ergotamine preparations and both were helped with injections of DHE 45. Ergotamine-caffeine suppositories also gave relief without causing undesirable reactions.

Conclusion

Our experience with typical migraine headaches shows that the suppository form of ergotamine can be easily administered by the patient, gives adequate relief of the symptoms, and does not cause appreciable side reactions.

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WHAT PER CENT OF THE PER DIEM?

In 1945 subscribers to Michigan Hospital Service paid eight million dollars toward the support of Michigan's hospitals. In 1953 the sum paid was over sixty-two million dollars. This has tended to maintain a ratio of 96 per cent of the contract charges. The number of cases hospitalized has trebled in this nine-year period (from 131,000 to 403,000) and the number of hospital days has almost trebled (from 1,000,000 to 2,825,000). The average case stayed in the hospital 7.73 days in 1945 and 7 days in 1953.

The cost of that 7.73-day stay averaged $54.20 in 1945. It cost $144.79 for the 7-day stay in 1953. This means that the per diem cost of the hospital bed was $7.01 in 1945 and now is $20.66—almost 300 per cent increase in a nine-year period!

Since no commodity used in the hospital or outside the hospital has had a 300 per cent increase in cost in this period of time, the inevitable question is "What is the explanation of the present per diem charge to the subscribers of Michigan Hospital Service?", in view of the fact that neither commodity cost nor the price of the nurses' hands has risen comparably.

It's a good question in view of the fact that the measurable factor of overutilization of prepayment plans by the physician doesn't come anywhere near this figure, measured either by percentages or dollars!

William Bromme, M.D.

—Editorial reprinted from the *News Bulletin,* Woman's Hospital, Detroit, May, 1954.

Detroit Physiological Society

Meeting of January 21, 1954

Dry Mounting as a Method of Increasing Contrast in Ordinary and Phase Microscopy

Willis W. Mathews, *Biology Department, Wayne University*

Objects which are difficult to stain or to see with the usual phase microscopic methods may be made visible with suitably prepared dry mounts. Using this technique with the phase microscope it has been possible to see and photograph unstained objects as small as 0.1 microns in diameter. These include the flagella of E. coli and four other species of bacteria and influenza Type A virus particles. Dry mounts of bacteria and typhus ricketsia are visible with ordinary objectives. Dry blood smears show mitochondria and nucleoli in addition to the nuclei and granules usually visible.

Dry mounts may be made as follows:

Clean No. 1 cover glasses by dipping in 70% alcohol and wipe with a clean cloth. Flame the dry cover glass. Place a drop of suspension at one edge of the cover and tilt the cover, allowing the drop to run across it. Dry rapidly in air without heat. When it is dry, flame the cover glass as in bacterial methods. Mount the cover with the smear down on a clean slide with a ring of shellac or similar material. If the smear shows extensive solid precipitate, it may either be diluted before smearing or the dried smear may be washed with distilled water, air dried and flamed again.

In viewing the smear, glare should be reduced to a minimum by careful adjustment of the microscope illumination.

Evaluation of Sedative Agents

Graham Chen and Charles R. Ensor
Research Laboratories, Parke, Davis & Co., Detroit, Michigan

The sedative agents may be divided into two major groups: (1) Those having mainly a depressive effect on the central nervous system and (2) those having a duel action, depression and/or stimulation, dependent upon dosage. To the first group belong a large number of barbituric acid derivatives (phenobarbital), acetyl ureas (carbromal), and sodium bromide. As has been reported previously (Chen and Portman, Arch. Neurol. & Psych. 68:498, 1952), the sedative property of this group of agents, in regard to potency, duration of action, and effective dose range, may be quantitatively ascertained by their suppressive effect on chemically induced convulsions of mice. This method is not applicable, however, in determining the sedative effect of the second group of compounds. Morphine, isonipecaine methodone, scopolamine, and diphenhydramine belong to this group. The first three of these were found in our laboratory to suppress the enhanced activity of rats induced by caffeine. This property appears to be unique in that it is not shared by any sedative agent. Scopolamine and diphenhydramine cause excitation in animals predominently; on the other hand, they possess the ability to raise the convulsive thresholds of electrical stimuli in mice. This anticonvulsant property is shown by other sedative agents only at anesthetic dose levels.

It remains to be confirmed as to whether or not these central depressive properties of the various sedative agents, as shown in laboratory animals, may account for some of their therapeutic effects in man. Two additional papers were also presented. The first of these, entitled "Tracer Studies of the Krebs Cycle in Normal and Diabetic Rats" by C. E. Frohman and J. M. Orten of Wayne University, provided no abstract.

The other paper, entitled "Thyroidal Iodine Accumulation of Several Species of Fresh and Brackish Water Teleost Fishes" by Aubrey Gorbman, Olga Berg (Columbia University), and Charles W. Creaser (Wayne University), has been published in *The Anatomical Record*, Vol. 117, Page 535, November 1953.

Doctor: Unnecessary treatments or medication must be paid for by someone. They reduce your income.

Michigan State Medical Society Past Presidents 1948-1952

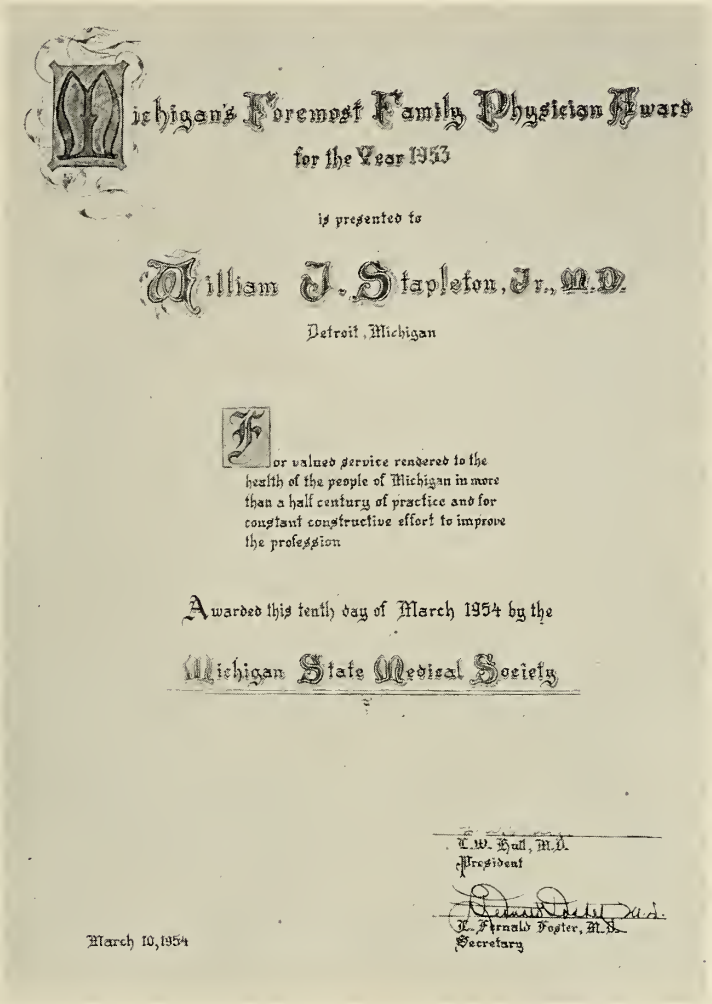


With this final panel, depicting MSMS leaders from 1948 to the immediate past Presidents, the review is complete. Here are men who, although they may have pioneered new fields, are at the center of the current history of medicine in Michigan. The period represented here brought some of the greatest threats to medical freedom; threats which for the moment have been surmounted. But nowhere in this group is one who cares to dwell in the past. With thousands of others who believe in MSMS and the future of the medical profession, they look forward.

(This is the final page in a series featuring MSMS past presidents from 1866 to the present. Each month, photographs of past presidents have been presented panel by panel as they appear in a display at MSMS headquarters in Lansing.)

President's Message

It is the custom of the Michigan State Medical Society House of Delegates at each annual session to name one of its members as "Michigan's Foremost Family Phyisican." William J. Stapleton, Jr., M.D., was so named for 1953 in recognition of unusual services to his patients, to his community, and to his profession.



Michigan's Foremost Family Physician Award

for the Year 1953

is presented to

William J. Stapleton, Jr., M.D.

Detroit, Michigan

For valued service rendered to the health of the people of Michigan in more than a half century of practice and for constant constructive effort to improve the profession

Awarded this tenth day of March 1954 by the

Michigan State Medical Society

L. W. Hull, M.D.
President

R. Fernald Foster, M.D.
Secretary

March 10, 1954

Dr. Stapleton was born and raised in Detroit. He was educated in Detroit schools and graduated from the Michigan College of Medicine. He has taught in and has been acting Dean of Wayne University College of Medicine.

It is probable that Bill Stapleton has never had a dull moment in his life, with a large practice, travel, and his extracurricular activities. He has dedicated an immense amount of his time and talents to the betterment of the community in which he has lived, to its great advantage. He has always put service before self. The community and the medical profession are grateful.

L. W. Hull, *President, Michigan State Medical Society*

Editorial

GERIATRICS

THIS NUMBER of The Journal is being devoted to Geriatrics. Problems of the aging are becoming more involved each passing year. Some of the economic situations have been commented upon throughout the year. The medical and health problems have been the especial study of the Geriatrics Committee of the Michigan State Medical Society, Dr. A. H. Price, M.D., of Detroit, chairman. This committee has been working diligently for over a year preparing for this number of The Journal, and almost the entire text is devoted to their efforts.

We wish to pay tribute to the chairman and to F. C. Swartz, M.D., of Lansing, who did much of the work and who sent the completed paper to the editor. We hope our readers will give this article attention, as the treatment of the aging will occupy an ever-increasing amount of their time. No one will escape this duty to the older people.

THE ADMINISTRATION'S "REINSURANCE" PLAN

THE "REINSURANCE" plan promised by the President in his special message to Congress on January 18, 1954, was introduced in the Senate on March 11, 1954 (S.3114) by Mr. Smith of New Jersey for himself and eight other Senators, including Senator Ferguson of Michigan. An identical bill was introduced simultaneously in the House of Representatives (H.R. 8356) by Mr. Wolverton of New Jersey as sole sponsor. He is the chairman of the Committee of Labor and Public Welfare whose reinsurance bill we discussed in the March issue of The Journal.

The expressed purpose of the Administration's new bill is "to encourage and stimulate private initiative in making good and comprehensive health services generally accessible on reasonable terms, through adequate health service prepayment plans to the maximum number of people, (a) by providing technical advice and information, without charge, to health service prepayment plans and to the carriers or sponsors thereof; and (b) by making a form of reinsurance available for voluntary health service prepayment plans where such reinsurance is needed in order to stimulate the establishment and maintenance of adequate prepayment plans in areas, and with respect to services and classes of persons, for which they are needed."

Such is the preamble of the bill quoted word for word. Certainly none will contest the worthiness of the sentiments expressed. This program is limited to prepayment service plans. The casual reader would understand that this scheme would be an inexpensive or no expense service which the government hopes to render: witness the provision in (a) above of technical advice "without charge." The bill sets up "within the Department of Health, Education and Welfare a National Council on Health Service Prepayment Plans." This Council shall consist of twelve members appointed by the Secretary without regard to civil service laws, who shall be familiar with the need for or the availability of personal health services, and not less than four of whom shall be experienced in the administration of health service prepayment plans."

There is no provision for recognition of the medical profession who successfully developed prepayment hospital and medical service plans and demonstrated the insurability of health services, or the Blue Cross-Blue Shield who did the job. What is to prevent the Secretary from appointing Henry Kaiser of Permanentee? or John L. Lewis.

FAULTY UTILIZATION

The development of voluntary prepayment plans and scientific medicine are complementary. The one, scientific Medicine, makes modern hospital care possible; the other, voluntary prepayment, brings modern hospital care within economic reach of the people.

Believe me, it is trite, but worth repeating —the hospital cannot exist without the doctor and the doctor reverts to the horse and buggy era without the hospital. We must live in harmony together and work out our mutual problems.

Kenneth B. Babcock, M.D., at Golden Goose Breakfast. March 11, 1954.

We suspected the Kaiser influence when we saw the first release in January and mentioned it editorially—that is the employment of salaried doctors in the plans which sell medical and health services. Such is the technical advice offered—they have not specified choice of the very people best qualified by experience to give such advice.

The Reinsurance Feature

There is also "created in the Treasury of the United States a Health Service Prepayment Plan Reinsurance Fund" to which shall be paid all reinsurance monies, capital advancements, investment returns, or assets from administration of the plan. Special funds must be set up for any special reinsurance plan established, and those monies segregated in the bookkeeping. There is no place in the bill stating the cost of reinsurance, but an amount is to be set by the Secretary which is found to be necessary to meet the needs, as estimated at time of reinsurance. When a carrier has a loss over and above his estimate of cost of administration and cost of insurance, the government reinsurance will take over only for his excessive losses and will pay 75% of them, not of the complete loss. We read in Sec. 307 (c) "the liability of the United States with respect to a reinsured plan shall be limited to the general or special account to which such plan has been allocated."

After June 30, 1959, the expense of administering the whole program, including part (a) shall be charged to and completely covered by the plans. The Federal Government takes no risk whatever after that date. The Reinsurance scheme must be self supporting. The costs of reinsurance are to be reviewed periodically, and can be every ninety days.

Presumably, this administration plan hopes to stimulate the establishment of new prepayment plans in new areas or among new groups of people where there is need. We can find nothing in the plan to further that objective more than what the unassisted plans have been doing for the past two decades except the reinsurance. The Blue Cross and Blue Shield could set up reinsurance if they find it necessary. However, Michigan at least, has not been troubled in that respect.

Unexplored Services

There are many fields in which prepayment insurance could be tried, and we had hoped this Administration would attempt to cover some of these areas: the indigent, either total, or partial, such as the "medically indigent," the unemployed, the old age assistance cases, the dependent children. Such groups are worthy of the same insurance self employed people can buy for themselves. These people, and they constitute a very large number of the population, are rightly the wards of the government, local, state, or national. They are entitled to just as good health care as is possible to give, but they cannot do for themselves, and the laws as now constituted place them under a great handicap.

A few laws could be changed allowing the governments to recognize their responsibility, and also allow the use of health plans now available through the payment of premiums out of money now spent as welfare by the various government agencies, or reimbursement as now done in Michigan with the home town care of veterans.

We believe the Administration plan will be found very inadequate. It places too many restrictions on the voluntary plans if they wish to use the reinsurance. Too little actual information as to cost is given. The whole amount of funds are placed in the U. S. Treasury with its stringent regulations, which is proper. We would be sorry to see the fund used the same as the OASI funds, that is, used for current government expense, and replaced by government bonds. In order to make a payment from this fund the government must either borrow more or issue a new tax. Money cannot be manufactured, and after once used must be replaced from the pockets of the people who pay taxes.

We had hoped this bill would be one we all could grasp immediately. We think it could be so changed. We regret the choice of the term "reinsurance." The plan being considered is definitely not "reinsurance." The program is not compulsory as was the plan proposed by Mr. Wolverton. There is a useful provision for the making of "reinsurance" segments to cover some new avenue of service in which the government could well invest some of its own money, but this bill provides for payment of 75 per cent of excess losses *to the extent of available money.*

We can see no advantage for our Michigan plans as yet, but believe such a program could well be evolved. We have made suggestions along that line.

HEARINGS ON THE ADMINISTRATION'S REINSURANCE BILL

THE REINSURANCE bill sponsored by the administration, Reinsurance of Health Plans (H.R. 8356, S. 3114) was the subject of hearings started March 24, 1954, before the House Committee on Interstate and Foreign Commerce. Mrs. Ovita Culp Hobby, H.E.W. Secretary, testified that the administration's Reinsurance Plan had been developed by the Under-Secretary of Health, Education and Welfare, Nelson A. Rockefeller, together with C. Milton Eddy, Connecticut General Life Insurance Company, Hartford, Conn.; Jarvis Farley, Massachusetts Insurance Company, Boston; Charles G. Hayden, M.D., Massachusetts Blue Shield, Boston; William S. McNary, Michigan Blue Cross, Detroit; H. Lewis Rietz, Lincoln National Life Insurance Company, Ft. Wayne, Indiana; J. Henry Smith, Equitable Life Assurance Society, New York; and James E. Stuart, Hospital Care Corporation (Blue Cross) Cincinnati.

Mrs. Hobby said these consultants were unanimous in agreeing that this was the only kind of voluntary plan the commercial insurance companies would accept, and that there was no opposition.

We were of the opinion that this group when invited to Washington, were handed a bill already written, and asked to make it workable. These gentlemen no matter how efficient could not have written that complicated, very technical 41 page bill in the six days they were in Washington.

Mrs. Hobby said reinsurance to plans (such as Kaiser) that furnish their own medical care could be offered, provided they place control over the manner in which medicine and dentistry are practiced *solely in licensed members of the profession.* She also stressed that (1) the bill forbids exercise of any supervisory or regulatory control over any carrier, hospital or other facility, except as specified in the act, and (2) the program would be wholly voluntary and no individual plans would be reinsured if it could be reinsured privately.

RISING COSTS OF THE HEALTH SERVICE PLAN

YOU are all acquainted with the nature of the project that was started in July, 1952, to investigate the reasons for rising costs in the administration of the health service plans. The Council Committee of which I happen to be chairman was charged with the duty of determining the part played by the doctor in this problem. We had no stomach for the job since we were in effect seeking evidence that might condemn our professional brothers. We approached the problem warily and leaned over backwards in evaluating the findings. You know the results of the survey and I shall not bore you with the details except to repeat that we as doctors have been lax in managing our patient-hospital problems.

The problem of overutilization of hospital service exists over the entire country. From a recent report of the National Opinion Research Center of the University of Chicago for the year June 1952 to June 1953 the days of stay for the insured was thirteen and for the non-insured ten. For surgery the insured averaged seven days while the non-insured averaged four days.

Our figures here in Michigan do not show so wide a difference but they follow the same pattern.

I suppose that these figures are balm to those of narrow mind who insist that voluntary health insurance cannot succeed. But to us who have been the prime movers in this field they constitute just one more flaw that we must correct if we are to keep voluntary health insurance rolling forward.

What is remarkable about this plan is not that so much is wrong but that so much is right. Starting fifteen years ago in an uncharted field that was shunned by all health insurance carriers we have developed the system by trial and error, without preliminary actuarial guidance, to the point where in Michigan alone during 1953 the Hospital Service plan did a gross business of over 68 million dollars.

It was inevitable that errors should appear and become magnified as the volume of business increased. Some of these have arisen from the administrative side, some from the hospitals and public and some from the medical profession. It is with the latter that we are concerned here now.

Remember that this is a service indemnity plan and that you, the doctor, start the patient towards the hospital and manage his stay there. If you feel, as you may have in former days, that the cost is being met by an "insurance company" whose financial setup is none of your worry then you will hospitalize patients for your own or their convenience regardless of the true need; you will

(Continued on Page 589)

William J. Stapleton, Jr., M.D.

Michigan's Foremost Family Physician

To have lived through the last fifty-four years of medicine as an active practitioner is a privileged experience. To live through it and keep abreast of it must be recorded as an unusual accomplishment, and William J. Stapleton, Jr., achieved just that.

Examination of his curriculum vitae gives an inkling of why he maintained a front position among his colleagues. Two years after graduation, he began a career of part-time teaching that lasted forty-five years. He began as lecturer on pharmacology and materia medica in 1902, and, to prepare himself, enrolled in the Pharmacy School of the Detroit College of Medicine. While teaching pharmacology, he became interested in the legal side of medicine and, true to pattern again, he studied law at the Detroit College of Law to prepare himself as a lecturer on medical jurisprudence. From 1907 to his retirement in 1947, he held the professorship of Medical Jurisprudence at Wayne University College of Medicine along with his duties sometime as assistant, for a while as acting and, finally, as Associate Dean.



His loyal and valuable service to medical education was recognized by Wayne University in 1949, when it conferred upon him the degree of Doctor of Arts in Medical Education, just as his loyal and valuable service to the practice of medicine was recognized by our Society in 1953, when the title of "Michigan's Foremost Family Physician" was conferred upon him.

Dr. Stapleton was born in Detroit's Corktown on Christmas Day, 1876. His father was Irish, his mother a Vermont Yankee. A good share of his life was spent in the Corktown area where he maintained his office at Third and Lafayette for many years. Like so many of us of an earlier day, he underwent the discipline of a paper route and various after-school and summer jobs. He still likes to recall the days when he was shaken out of bed by his grandmother each morning at four to cover his *Free Press* route, and his venture into business as a door-to-door tea, coffee and spice salesman.

Dr. Stapleton, an erect six-footer, carries his 200 pounds about as easily as a man in his mid-fifties. He describes himself as having been skinny up to the age of thirty-five when all he had was 135 pounds to cover his six feet of frame. Age has touched him very lightly, both physically and intellectually. His interests, of course, have changed. Years ago he was an ardent theater goer. He knows the classic plays and the prominent actors and actresses that played in them. While he still likes to see a good play or movie, the theater isn't nearly as attractive to him now.

His taste in music has changed also—he prefers the tuneful, rhythmic music that lends itself to humming, "the kind that makes you want to dance," as he puts it.

He has never let up on his love of reading, and his scope is wide. He has been an intense student of medical history, and of books by and about doctors. He likes to read the Bible and still likes a good love story. Current magazines such as the *Saturday Evening Post, Reader's Digest, Holiday, Life, New York Times* and the *Manchester Guardian* are on his regular subscription list. And, he finds time to practice medicine, to write and to visit his old cronies whenever illness sidetracks them. His weekly "By the Way" column and his annual 100 Books for Doctors, in the *Detroit Medical News,* have attracted national attention. Into the words he writes, he passes on the empathy he has with human beings, the gentleness and warmth that is so characteristic of him.

Small wonder it is that Dr. Stapleton belongs to every medical, cultural and civic society of importance or that he has been selected to work on every committee and has occupied every elective office in the Wayne County Medical Society. Of all the jobs he has worked on for Medicine, the one he loves most is his present one of being a member of the Editorial Board of the *Detroit Medical News*. The Board, incidentally, considers him its most valuable asset. He has been urged to publish his "By the Way" in book form and maybe he will—as yet he hasn't said yes and he hasn't said no.

In his younger days Dr. Stapleton did a great deal of traveling, usually to medical meetings. He has visited Europe ten times, has been to Mexico, to South America, to North Africa and the Holy Lands. The impression shouldn't be left that he has given up travel. Let him hear of some historic spot, particularly if there's a medical or a bookish connotation, and away he goes. His diary will record the important parts of his journey. It was such happenings that were chronicled in "The Doctor's Log" that was once a feature of The Journal of the Michigan State Medical Society.

Dr. Stapleton has two children by his first marriage, David and Sally—both valuable citizens in the community. Several years after the death of his wife, he married Helen Hall, whom many Wayne University graduates will remember as the efficient Secretary of the Dean at the Medical School.

During the Clinical Institute this past March, a testimonial luncheon was given Dr. Stapleton following his award as "Michigan's Foremost Family Physician." The English Room of the Sheraton-Cadillac was filled to overflowing. People came to honor the prototype of the kind of doctor who has won the highest esteem for the profession. He has been around a long time. Judging by the zest and vigor with which he attacks a job, he's going to be around for a long time yet.

Never has the cliche of "so many years young" been more applicable than to Dr. Stapleton. He really is only seventy-eight years young. That is why his friends of all ages call him Bill—respectfully and affectionately. Bill, the fellow that could, if he wanted, sign his name William J. Stapleton, Jr., M.D., Ph.G., LL.B., F.A.C.P., D.A.M.E.

F. A. Weiser, M.D.

MSMS AND THE SALK VACCINE EXPERIMENT

(Continued from Page 538)

State Health Commissioner, stated that MSMS "concurs with your conclusion to go forward with the experiment on children by mass inoculation of the Salk poliomyelitis vaccine . . . . but would like to make clear" certain reservations and/or understandings. These included:

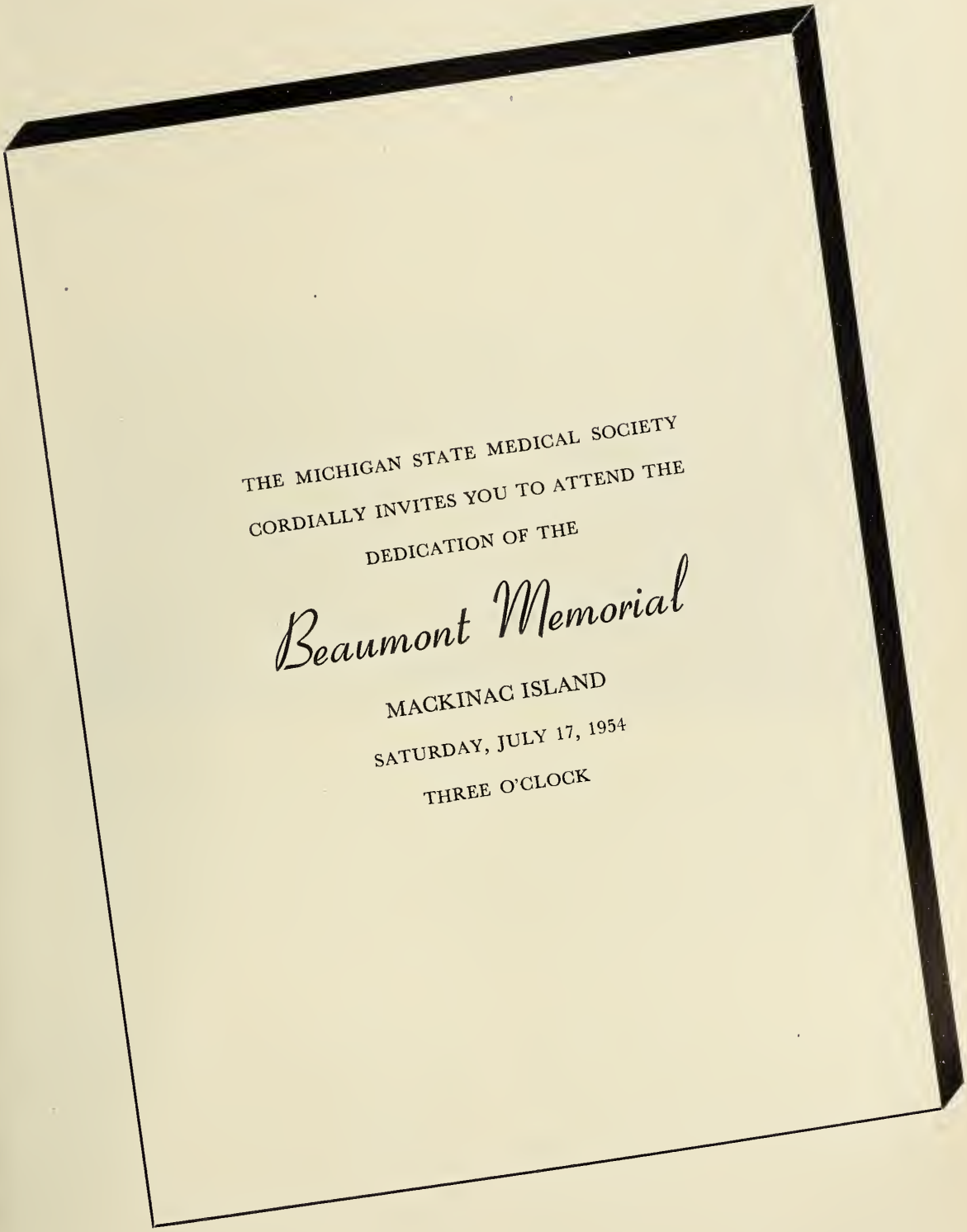
1. That the State Health Commissioner would accept the certification of the special advisory committee of the National Foundation as sufficient evidence of safety and potency of the vaccine, thereby assuming full responsibility. It was pointed out that the April 14, assurances were those of an advisory committee without power or legal responsibility.

2. That the timing of the test would not endanger the children participating, in the opinion of the State Health Commissioner.

3. "That the fact be recognized by all concerned that the National Foundation for Infantile Paralysis assumes all moral, ethical, and legal obligations to the child being inoculated in this highly experimental program."

4. "That upon request by the family doctor of any child participating in the test, the doctor be informed as to whether the child has received the vaccine or the control material, the name of the manufacturer of the vaccine, and other items included in the vaccination records of his patient that he might request."

To all MSMS members, their families and friends—



Dedication of Beaumont Memorial

The dedication of the Baumont Memorial on Mackinac Island next July 17 will climax ten years of close co-operation between the Michigan State Medical Society and the Mackinac Island State Park Commission in bringing to reality the dream of a shrine to William Beaumont, M.D., on the site where he started his revolutionary physiological research.

It was in July, 1944, that W. F. Doyle as Chairman of the Mackinac Island State Park Commission presented the Beaumont Gavel to The Council of MSMS and recommended appointment of a permanent joint committee to work towards the reconstruction of the Earley House to become a memorial to Dr. Beaumont.

The gavel was carved from one of the original timbers in the historic old house, cut from virgin Mackinac Island pine. At the time it was the only timber ever allowed to be taken from the structure. Hand-turned personally by Mr. Doyle, the Beaumont Gavel is still used by the Chairman at every meeting of The Council and of its Executive Committee. It bears a handsome silver plate with the following legend:

> **Beaumont Gavel**
> **Presented to The Council, MSMS**
> **by the**
> **Mackinac Island State Park Commission**
> **Mackinac Island, July 21, 1944**



A Decade of Dreams, hard work and co-operation by the Michigan State Medical Society and the Mackinac Island State Park Commission will be fulfilled July 17 with the dedication of the beautiful Beaumont Memorial. Pictured is the start of it all when W. F. Doyle (standing, center), then Chairman of the Mackinac Island Commission, presented the Beaumont Gavel in 1944 to The MSMS Council. With the exception of Secretary L. F. Foster, M.D., every Council member in the photo has since served as President of MSMS. Seated, left to right, are the late A. S. Brunk, M.D.; the late V. M. Moore, M.D., then Council Chairman who accepted the token, and C. R. Keyport, M.D., of Grayling, President in 1944. Standing, left to right behind Mr. Doyle, are Dr. Foster of Bay City; the late P. L. Ledwidge, M.D.; R. S. Morrish, M.D., Flint; C. E. Umphrey, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; E. F. Sladek, M.D., Traverse City; and O. O. Beck, M.D., Birmingham.

In presenting the gavel, Mr. Doyle stated: "We are happy to work with the Michigan medical profession on something of which we all shall be very proud."

Throughout the ten years of planning and building, the Mackinac Island State Park Commission, sparked by Mr. Doyle, has maintained its enthusiasm. . . . And when the Beaumont Memorial is dedicated on July 17, it's certain that among the proudest of those taking part will be W. F. Doyle of Mackinac Island and Lansing.

Additional Contributors to Beaumont Memorial Restoration Fund

Hugo Aach, M.D., Kalamazoo; C. A. Alexander, M.D., Kalamazoo; John V. Allen, M.D., Lincoln Park; Louis Alper, M.D., Detroit; Elliott B. Alpern, M.D., Detroit; Sam Alpiner, M.D., Detroit; George H. Andries, M.D., Detroit; Henry A. Archambault, M.D., Detroit; R. F. Archambault, M.D., Detroit; M. E. Auble, M.D., Detroit.

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Michael Faber, M.D., Benton Harbor; Sherman P. Faunce, M.D., Detroit; Meryl Fenton, M.D., Detroit; Leon Fill, M.D., Detroit; Frederick J. Fischer, M.D., Detroit; Norman W. Flaherty, M.D., Dearborn; Joseph L. Fleming, M.D., Detroit; Arthur L. Foley, II, M.D., Rogers City; Leonard Fox, M.D., Wyandotte; John Freedman, M.D., Detroit; Wilmer Freeman, M.D., Detroit.

Ferdinand Gaensbauer, M.D., Pontiac; Henry Galantowicz, M.D., Detroit; Herman B. Gaston, M.D., Detroit; Harold R. Gilbert, M.D., Wyandotte; Arthur Goldberg, M.D., Detroit; Harry Goldberg, M.D., Detroit; Nathan Goldberg, M.D., Detroit; M. I. Goldin, M.D., Detroit; Leo E. Grajewski, M.D., Detroit; William Gramley, M.D., Detroit; William A. Grant, M.D., Milford; Morris Z. Greenberg, M.D., Detroit.

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William C. Noble, M.D., Ecorse; Arthur B. Norton, M.D., Detroit; Charles S. Norton, M.D., Detroit; William C. Noshay, M.D., Detroit.

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Edward L. Quinn, M.D., Detroit.

R. O. Ragué, M.D., Benton Harbor; John W. Rebuck, M.D., Detroit; William E. Redfern, M.D., Detroit; H. W. Reed, M.D., Detroit; E. J. Rennell, M.D., Coldwater; Mary Rieger, M.D., Detroit; John L. Riker, M.D., Alpena; Aaron Z. Rogers, M.D., Detroit; John Rosenfield, M.D., Detroit.

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William H. Taurence, M.D., Wyandotte; Thomas A. Tenaglia, M.D., Ecorse; Rudolph G. Tenerowicz, M.D., Detroit; Edward G. Truszkowski, M.D., Detroit.

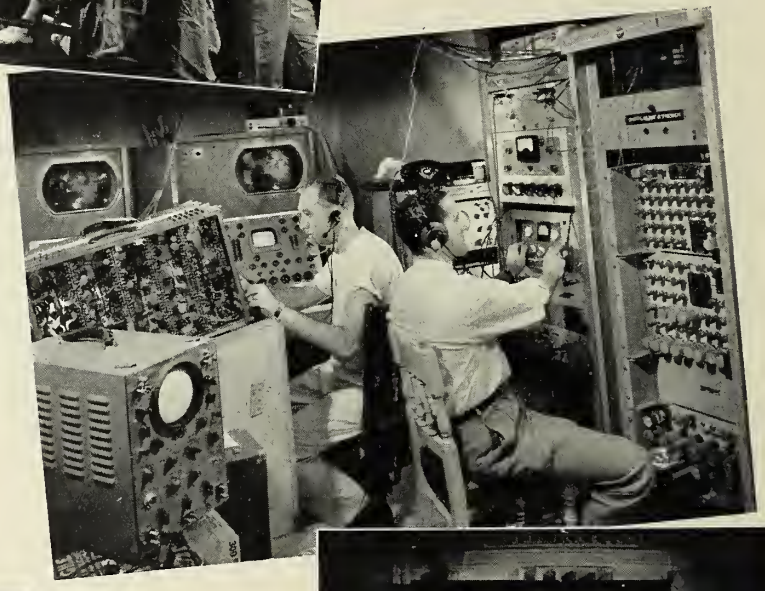
E. G. Upjohn, M.D., Kalamazoo.

(Continued on Page 586)

Color TV Big Hit at MCI



FROM THE OPERATING ROOM. . . . Television broadcasts in full color two hours daily were the most dramatic feature of the Eighth Annual Michigan Clinical Institute in Detroit, March 10-12. From "studios" in Harper Hospital (top picture), cameras brought a closeup view of surgery and clinical discussions that otherwise would have been impossible. Note special surgical camera on boom at right.



THROUGH AN ELECTRONIC MAZE. . . . The improvised control room (at right) at the hospital held thousands of dollars in equipment. Skillful technicians manned the bewildering layout to keep the color pictures in balance. Each telecast required a complete crew of 10. Programs were beamed by microwave relay from the hospital to the top floor of the Sheraton-Cadillac.



RECOGNITION in the form of an honorary scroll was given Smith, Kline & French Laboratories of Philadelphia, sponsor of the television series. Lewis M. Lang (right), director of the TV unit, accepted the scroll from MSMS President L. W. Hull, M.D., during the first telecast.

ONTO A GIANT SCREEN. . . . From a massive projector, the picture was thrown on a screen in the Grand Ballroom. Attendance at the television broadcasts averaged 430, with a peak of 543 on March 11. The 1954 MCI was the second statewide medical meeting in the nation to feature color telecasts.





"FOREMOST FAMILY PHYSICIAN" of the year, William J. Stapleton, Jr., M.D., of Detroit, received his scroll from L. W. Hull, M.D., MSMS President, at the close of the first assembly. Afterwards, Dr. Stapleton was honored at a luncheon. (See profile sketch of Dr. Stapleton elsewhere in this issue.)





(Above) RECORD-BREAKING NUMBERS visited every display in the exhibit area before and after each assembly and during intermissions. Registration for the 1954 Michigan Clinical Institute totaled 2,503, the greatest since the mid-year series began in 1947. The exhibit also was the greatest in MCI history, presenting a varied array of products, equipment and services vital to the practice of medicine.

(Below) CROSS-SECTION OF MICHIGAN medicine is typified in this segment of the audience at the Eighth Annual MCI. Pictured gaining facts significant to their daily practice are doctors of medicine, young and old, from communities large and small. If you could read their badges, you would find represented in this one small group several fields of medicine, the President of a county medical society, an MSMS Past President, residents and visiting Canadian M.D.'s.



A PACKED AUDITORIUM heard Albert B. Sabin, M.D., of Cincinnati, present his lecture on the controversial topic of vaccination for poliomyelitis. Often the MCI serves as a testing ground for new ideas in medicine and new techniques for presenting them. Already plans have been laid for adding "something new" in 1955 which will dramatically emphasize the rapid progress of medical science.



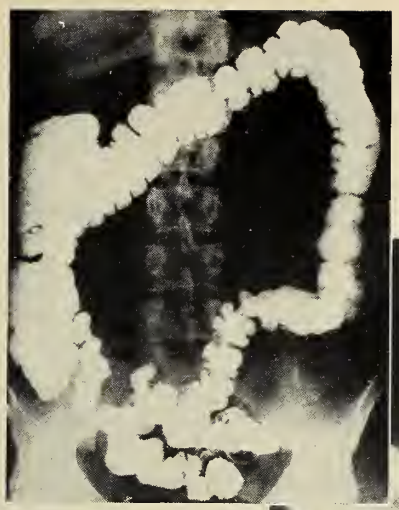




MANY RELATED GROUPS find the MCI an excellent time to hold meetings. Among the more than twenty special events held in conjunction with the 1954 institute was the annual meeting of the Michigan Heart Association Board of Directors, at which Frank Van Schoick, M.D., of Jackson, assumed the presidency. The newly-formed Michigan Chapter, American College of Surgeons, held its first all-day meeting March 9, the day before the MCI opening. (Top photo)

MCI PRESS COVERAGE was intense, with Dr. Sabin's views gaining the widest attention. In a special pressroom conference following his lecture, he discussed his research with science writers representing Detroit newspapers, nationwide wire services and the *New York Times*. Other speakers received a similar reception by newsmen seeking to interpret the advance of medicine. (Center)

SURGICAL MOTION PICTURES, shown continuously throughout each day, have contributed greatly to the success of the MCI for several years. At the 1954 institute MSMS paid tribute to Davis & Geck, Inc., of Danbury, Conn., producer and sponsor of the long series of color movies. A. Weisbrodt (left), director of the Davis & Geck film library, accepted a scroll from L. W. Hull, M.D., MSMS President. (Bottom photo)



Normal Colon



Ulcerative Colitis



Atonic Colon

Smoothage and Bulk in Correcting Constipation

To initiate the normal defecation reflex, the "smoothage" and bulk of Metamucil® provide the needed gentle rectal distention.

Once the habit of constipation has been established, due to any of a large number of causes, it becomes a major problem. Self-medication with irritant or chemical laxatives, or repeated enemas, usually causes a decreased, sluggish defecation reflex and may result in its complete loss.

Rectal distention is a vital factor in initiating the normal defecation reflex, and sufficient bulk is thus of obvious importance in restoring this reflex. Metamucil provides this bulk in the form of a smooth, nonirritating, soft, hydrophilic colloid which gently distends the rectum and initiates the desire to evacuate. Metamucil demands extra fluid, imparting even greater smoothage to the intestinal contents.

It is indicated in chronic constipation of various types—including distal colon stasis of the "irritable colon" syndrome, the atonic colon following abdominal operations, repressions of defecation after anorectal surgery and in special conditions such as the management of a permanent ileostomy. Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent.

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is supplied in containers of 4, 8 and 16 ounces. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

BIRTHS SET NEW MARK IN 1953

Provisional figures for 1953 show a cumulative total of 181,518 births, highest number to be registered in any one year in the history of the state. The provisional total for 1952 was 176,642, a record up to that time.

SUMMER TOPICAL FLUORIDE PROGRAM SET

This summer, some 20,000 boys and girls in thirty-six Michigan counties will have an opportunity to have topical applications of fluoride to their teeth in a statewide program carried on for the fourth year under the direction of the Section of Public Health Dentistry of the department.

The work will be done by forty-seven junior dental students and dental hygienists from the University of Michigan. It will be supervised in the communities by the local dentists, with assistance from health, school and civic groups.

The boys and girls treated will be from three to thirteen years of age. A fee of $3 to $4 will be charged, sufficient to reimburse the students for living expenses and to pay for expendable supplies.

Growth of the summer fluoride program since it was started in 1951 proves its value. In the first year, seventeen students treated the teeth of 5,700 children. In 1952, in response to increased community requests and student interest, the number of students grew to twenty-seven and they treated 11,000 boys and girls. In 1953, students numbered thirty-seven and boys and girls benefiting reached 16,500. This year, forty-five students are expected to treat the teeth of 20,000 boys and girls in the thirty-six counties scheduled.

COMPLACENCY A PROBLEM IN VD CONTROL

Public complacency is creating a very real problem in venereal disease control. This complacency together with over-confidence in penicillin treatment, incomplete reporting of cases, inadequate contact interviewing and tracing along with greatly reduced appropriations for venereal disease control have created a vicious cycle. Unless this cycle can be broken there is serious danger that the outstanding progress of the last decade in the control of the venereal diseases will be lost.

Communities need to be made aware of the problems that exist in their immediate areas. Information on the incidence of the veneral diseases by area will be furnished to health departments and physicians by the Division of Tuberculosis and Adult Health upon request.

VISION AND HEARING TRAINING FOR LOCAL TECHNICIANS

Short courses will be offered again this summer to train locally employed persons to do vision and hearing screening as a part of community programs. As in the past, the courses will be given in co-operation with teacher training colleges, and a limited number of stipends for board and room will be available from the department.

The course for vision technicians will be held at Central Michigan College of Education at Mt. Pleasant, July 12 to 16, with possible courses at Ypsilanti and Kalamazoo also.

The course for hearing technicians is planned for the week of June 28 at Michigan State Normal College at Ypsilanti.

REVISED DIRECTORY OF LOCAL HEALTH DEPARTMENTS ISSUED

The newly revised Directory of County, District and City Health Departments, issued by the Division of Local Health Administration of the department, is available upon request.

NEW SEX EDUCATION PAMPHLET FOR PARENTS

A pamphlet that physicians may find useful for inquiring parents is "Sex Education within the Family," recently issued by the Michigan Department of Health. It is a joint publication with the Michigan Department of Mental Health and is used by both departments in their work with parents. It is available from local health departments and from the Michigan Department of Health.

"EXPECTANT PARENTS" IS NEW VERSION OF "HEALTH OF THE PROSPECTIVE MOTHER"

A new booklet, "Expectant Parents," has been issued by the department to take the place of "The Health of the Prospective Mother" which has been in print for many years. In the new booklet, written for both mothers and fathers, more emphasis has been placed upon the mental health aspects of pregnancy and on the importance of nutrition during pregnancy and lactation. Chapter headings are set up on the basis of a possible sequence of classes for expectant parents. The booklet is available from the Section of Maternal and Child Health of the department.

REORGANIZED MICHIGAN PUBLIC HEALTH ASSOCIATION NOW FUNCTIONING

At the 33rd Annual Michigan Public Health Conference at the Statler in Detroit, May 5 to 7, the reorganized Michigan Public Health Association got under way. The Association now has a comprehensive framework of divisions, with leadership vested in a house of delegates and a board of directors.

Appetite Poor?

... here's a practical, natural stimulant for an immediate response

THROUGHOUT the history of medicine, wine—the classic beverage of moderation—has been widely but empirically considered to be a reliable stimulant to the sense of taste.

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*Research information on wine is available upon request.

In Memoriam

CARL C. BAILEY, M.D., died February 9, 1954, in Detroit at the age of fifty-six.

A graduate of the University of Michigan Medical School, Dr. Bailey served his internship at Providence Hospital. He had practiced in Detroit since 1923.

Dr. Bailey was a veteran of World War II and a member of the American Academy of General Practice.

Surviving are his widow, Clara; a son, William Bailey, M.D.; a daughter, Mrs. Marilyn Reed; his father, and three sisters.

WILLIAM ROSS BALLARD, M.D., retired Bay City surgeon, died February 11, 1954, at the age of eighty-five. Prior to his retirement seven years ago, Dr. Ballard had practiced in Bay City for more than forty years. Dr. Ballard was elected an emeritus member of MSMS in 1946.

Dr. Ballard had served as chief of staff both at Mercy Hospital, Bay City, and Women's Hospital, Saginaw. He was one of the first two doctors of medicine in Bay County to be named a Fellow of the American College of Surgeons, receiving this honor in 1922.

Born in Washington, Illinois, he attended public schools in Pioneer, Ohio, later teaching school in Ohio. He graduated from the Michigan College of Medicine and Surgery, Detroit, in 1894. Dr. Ballard took post-graduate studies in Chicago, Mayo Clinic, and Johns Hopkins University.

Dr. Ballard first practiced in Auburn, moving to Saginaw in 1900. He entered practice in Bay City in 1905. He was an enthusiastic sportsman, and traveled widely on numerous hunting trips. He was active in fraternal societies, and was a member of the Kiwanis Club. He was a member of the First Presbyterian Church.

Dr. Ballard is survived by a daughter, Mrs. Kathleen Plum; two sisters, Mrs. Samuel Houghton and Mrs. Samuel Cooper, all of Bay City; two grandsons and one granddaughter.

LOUIS BRAITMAN, M.D., of Detroit, passed away suddenly on January 23, 1954, at the age of forty-five. A member of the Michigan State Medical Society Legislative Committee, Dr. Braitman had attended a meeting of that group in Lansing the evening before his death.

Dr. Braitman, born in Detroit, was graduated from the University of Michigan Medical School in 1931. He interned at Receiving Hospital and at Eloise Hospital, where he was a resident in surgery from 1933 to 1935.

Dr. Braitman had been in surgical practice in Detroit since 1935. Dr. Braitman was on the staffs of Grace Hospital and Mt. Carmel Mercy Hospital, and acted as voluntary assistant in the out-patient department of Grace Hospital. He was a member of the American College of Surgeons and the Detroit Surgical Society. He also was active in the Probus Club and the Maimonides Society.

Dr. Braitman is survived by his wife, Arabelle, a son, Robert E., and a daughter, Marcia.

NANCY RODGER CHENOWETH, M.D., a pioneer woman physician in Michigan, who first practiced medicine in the Upper Peninsula before the turn of the century during the booming lumber days, died February 15, 1954, in Peterborough, Ontario, at the age of eighty. She had been an emeritus member of the Michigan State Medical Society since 1945.

Born in Belwood, Ontario, Dr. Chenoweth finished high school in Fergus, Ontario, in 1889 and entered Trinity Medical College and Women's Medical College of Toronto, which later were incorporated with the University of Toronto. Receiving her M.D. degree in 1894 at the age of 21, she began practice in Menominee, where she remained for ten years until her marriage to the Rev. George T. Chenoweth in 1905.

With her husband, a Methodist minister, she went to northwestern Canada, practicing in wilderness communities of Alberta and British Columbia.

Following the death of her husband in 1911, Dr. Chenoweth returned to Michigan and began practice in Escanaba, where she remained in practice until 1947. After a refresher course and postgraduate study in x-ray at the University of Chicago in 1915, Dr. Chenoweth installed one of the first x-ray machines in the Upper Peninsula.

Although in failing health, she continued in active practice throughout the doctor shortage during World War II.

In 1947 she renewed her license to practice in Ontario, and moved to Peterborough to become associated with her son, Rodger Chenoweth, M.D. Illness forced her to retire from practice in 1950.

Dr. Chenoweth is survived by her son, and one sister.

BENJAMIN F. COOPER, M.D., a lifelong resident of the Detroit area and a practicing physician in Detroit, since 1931, died suddenly January 19, 1954. He was forty-two years old.

Dr. Cooper was graduated from the Wayne University College of Medicine in 1929. During World War II, he was a major in the Army Medical Corps. He interned at Grace Hospital.

Dr. Cooper was on the staff of both East Side General Hospital and Holy Cross Hospital. He was a Fellow of the American College of Surgeons and a member of the Detroit Surgical Society.

Survivors include his wife, Elizabeth, and three children, Thomas, Peggy, and Sue.

(Continued on Page 572)



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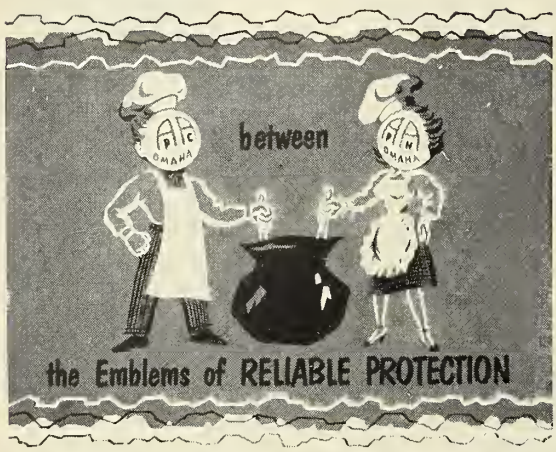
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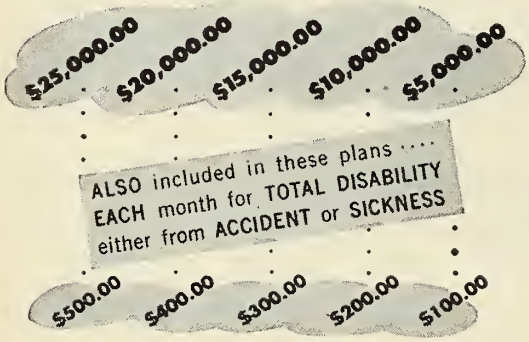
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(Continued from Page 570)

JOSEPH L. DeROSIER, M.D., who had practiced in Detroit since 1913, with the exception of his service in World War I, died December 1, 1953. He was sixty-six years old.

Born in Canada, Dr. DeRosier came to this country to attend the University of Maryland. He received his M.D. degree in 1911 and interned at St. Raphael Hospital, New Haven, Connecticut.

During World War I, he served as a flight surgeon from August, 1917, to November, 1919.

Dr. DeRosier is survived by his wife, Helen; two daughters, his father, three brothers, and two grandchildren.

ANDROS GULDE, M.D., who had practiced in his native community of Chelsea for the past fifty years, died December 22, 1953, at the age of seventy-nine.

A life member of the Michigan State Medical Society, Dr. Gulde was nominated in 1952 by the Washtenaw County Medical Society as "Michigan's Foremost Family Physician."

Following his graduation from Chelsea High School, Dr. Gulde attended the University of Michigan, graduating from the Medical School in 1903. All of his professional career was spent in Chelsea with the exception of one year during which he studied in the Graduate School of the University of Vienna in Austria.

For many years, he was a director of the Chelsea State Bank.

Dr. Gulde is survived by his wife Eunice; a daughter, Mrs. William S. Doyle, of Lowell, and a son Andros of Evansville, Indiana. Three grandchildren also survive.

WILBER F. HOYT, M.D., who served the community of Paw Paw as a family physician for fifty-six years, died March 17, 1954, at the age of ninety-one. He was an Emeritus member of MSMS.

Dr. Hoyt was graduated from Michigan Agricultural College and from Starling Medical College, now Ohio State University Medical School. He spent a year as resident physician at St. Francis Hospital. On two occasions, in the early 1900's, Dr. Hoyt traveled abroad taking post-graduate work at Samaritan Hospital, London.

Before moving to Paw Paw, Dr. Hoyt practiced five years in Grand Rapids.

Dr. Hoyt was credited with having assisted in the delivery of some 1,200 infants. In 1951, he was honored at a community banquet in Paw Paw.

He had been in ill health for several years.

ROELOF LANTING, M.D., director of the Shiawassee County Health Department, was killed December 13, 1953, when his private airplane crashed near East Lansing.

Dr. Lanting, fifty years old, was returning from Selfridge Field to his home in East Lansing after partici-

(Continued on Page 574)

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1. Rev. Gastroenterology 20:744 (Oct.) 1953; abstract in J. A. M. A., 153:1580 (Dec. 26) 1953.

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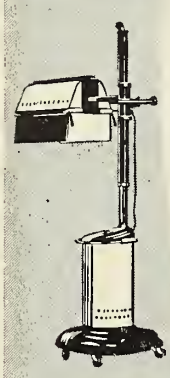
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ROELOF LANTING, M.D.

(Continued from Page 572)

pating in a training program of the 439th Fighter Bomber Wing Reserve Unit, in which he was a Lieutenant Colonel and Flight Surgeon.

Dr. Lanting first became director of the Shiawassee County Health Department upon his return from active service in World War II. In 1946, he moved to Lansing as City Health Director, later becoming director of the combined Lansing-Ingham County Health Department. He returned to the Shiawassee County position in July, 1952. Prior to his war service, he had held public health positions in Kentucky and the Upper Peninsula of Michigan.

Born in Jamestown, Michigan, Dr. Lanting was a graduate of Hope College and the University of Michigan Medical School.

He had been a licensed pilot since 1937, and had made private flights all over the Western Hemisphere.

He is survived by his widow, Helen Lanting, M.D., director of the Lansing Child Guidance Clinic; a daughter, Mrs. Gaynor Dykstra, of Detroit, and a son, Derk Lanting, of Camp Kilmer, N. J. Two sisters and four grandchildren also survive.

WILLIAM E. McNAMARA, M.D., one of Lansing's best-known surgeons, died January 19, 1954, following a long illness. He was seventy-six years old.

Born in Brighton, Dr. McNamara was graduated from the University of Michigan Medical School in 1902. He practiced in Brighton until 1905 when he moved to the Upper Peninsula.

Since 1912 he had practiced in Lansing, and was a past president of the Ingham County Medical Society and a former Chief of Staff of St. Lawrence Hospital.

Dr. McNamara was a Fellow of the American College of Surgeons.

He also was active in civic and business affairs. He was a founder of the Michigan Life Insurance Company, and one of its directors for many years. Dr. McNamara was the first president of the Peoples State Bank, Lansing, and a member of the first Board of Directors of the Central Trust Company. He also participated in fraternal affairs.

Dr. McNamara was a great hunter and sportsman, highly interested in the field of conservation and reforestation. He traveled throughout the world. He was a founder of the Hiawatha Sportsmen's Club and maintained a summer home at the Club.

Dr. McNamara is survived by two sons, B. E. McNamara, M.D., and W. B. McNamara, both of Lansing, two daughters, Mrs. Frank B. Woodruff, New York City, and Mary Jane McNamara, a first lieutenant in the WAAF; nine grandchildren and two great-grandchildren.

JACK L. MILLER, M.D., who practiced in Jackson since 1938 following his internship at W. A. Foote Memorial Hospital, died February 14, 1954, after an illness of several months. He was forty-three years old.

Born in New York City, Dr. Miller moved to De-

(Continued on Page 576)



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JACK L. MILLER, M.D.

(Continued from Page 574)

troit as a youth and was graduated from Detroit Northern High School in 1929. He attended Wayne University, graduating from the College of Medicine in 1936.

Dr. Miller was on the staffs of both Foote and Mercy Hospitals in Jackson and had served as Chief of Obstetrics at Foote Hospital for two years.

He was a member of the American Academy of General Practice.

Dr. Miller served as an officer in the Army Medical Corps from 1942 until 1946, attaining the rank of captain. Most of his war service was in the Aleutian Islands. Dr. Miller's survivors include his widow, Jessie; a daughter Rhoda; two brothers, Sam Miller, M.D., California, and Maurice Miller of Detroit; two sisters, Mrs. Samuel Leib, and Mrs. Alfred Mitteldorf, Detroit, and his mother Mrs. Rebecca Lesser, also of Detroit.

BENJAMIN NIBBELINK, M.D., died January 10, 1954, in Kalamazoo, where he had practiced since 1912. He was sixty-six years old.

Dr. Nibbelink was a native of Grandville. He was a graduate of the Detroit College of Medicine, and specialized in obstetrics.

Surviving are his widow and two sons, Don D. of Rochester, N. Y., and Paul, serving in the Army at Fort Leonard Wood, Missouri. Two grandchildren also survive.

DeVERNE C. SMITH, M.D., of Flint, died December 17, 1953, at the age of seventy-three.

Dr. Smith was a native of Vernon Center, New York, and had practiced medicine in Flint since 1918. He was a graduate of the University of Michigan Medical School receiving his M.D., in 1903. Before moving to Flint he had practiced medicine in Flushing, New York.

He was elected to life membership in MSMS in September, 1951.

Dr. Smith is survived by his widow, Blanche; a son, Eugene C. Smith, M.D., and a daughter, Mrs. Donald Seal, all of Flint. Also surviving are four grandchildren, two sisters, and a brother.

BERNARD H. STARMANN, M.D., of Cass City, died suddenly March 12, 1954, at the age of forty-seven. He was stricken in his automobile at night while making a professional call.

Dr. Starmann was born in St. Joseph, Missouri, and was graduated from Creighton University at Omaha, Nebraska. After interning at St. Mary's Hospital in Detroit, he started practice in Cass City in 1932.

Dr. Starmann was a past president of the Tuscola County Medical Society, a charter member of the Gavel Club and a leader in various community activities.

He is survived by his widow, Lucy; three daughters, one son, and a sister.

(Continued on Page 578)

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(Continued from Page 576)

LOUISA AUGUSTA ROSENTHAL THOMPSON, M.D., first woman to graduate from University of Michigan medical school, died March 31, 1954 in a Spring Lake nursing home. She was ninety-four.

Dr. Thompson was a native of Fort Wayne, Indiana. She received her medical degree in 1884. She was also a graduate of the University of Vienna.

Dr. Thompson first practiced in New York City before moving to Traverse City and later to Grand Rapids. She retired thirty-five years ago and moved to Spring Lake. Her husband, also a physician, died many years ago.

H. ROY WILSON, M.D., of Saginaw, died February 16, 1954, at the age of seventy-four, following a prolonged illness.

A native of Saginaw, Dr. Wilson attended public school and was graduated from the former Saginaw Valley Medical College.

For almost fifty years, Dr. Wilson served as Saginaw physician for the Chesapeake and Ohio Railroad, formerly the Pere Marquette. His father, Joseph M. Wilson, M.D., with whom he started practice, first started the family association as railroad physician.

In earlier days, Dr. Wilson was considered an authority on infections and was credited by many railroad men for salvaging limbs injured in train accidents.

Dr. Wilson has been a Retired Member of MSMS since 1947.

Dr. Wilson is survived by his wife, Hallie; a son, Joseph, a sister, and two grandchildren.

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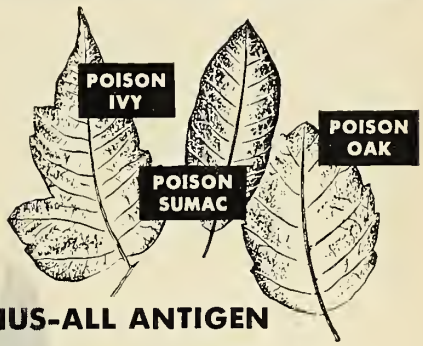
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A. C. Furstenberg, M.D., Ann Arbor, is the author of an article entitled "Introduction, Diagnosis and Differential Diagnosis" for a symposium: "Carcinoma of the Larynx" which was presented at the Fifty-Eighth Annual Session of the American Academy of Ophthalmology and Otolaryngology, October 11-16, 1953, Chicago, Illinois, and published in *Transactions, American Academy of Ophthalmology and Otolaryngology,* January-February, 1954.

N. Craig Roberts, M.D., and Christopher Deen, M.D., Detroit, are the authors of an article entitled "Conservative Management of Orbital Injuries" published in *Kresge Eye Institute Bulletin,* August, 1953.

N. Craig Roberts, M.D., Detroit, is the author of an article entitled "Report of Bacillus Pyocyaneus Infections of the Eye," Report of Four Cases, published in *Kresge Eye Institute Bulletin,* August, 1953.

Joseph K. Heckert, M.D., Lansing, is the author of an article entitled "Headaches Due to Tonsils and Adenoids" reprinted from THE JOURNAL of the Michigan State Medical Society, January, 1954, in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

George L. Waldbott, M.D., F.A.C.P., Detroit, is the author of an article entitled "Further Observations on Smokers Respiratory Syndrome" digested from *Annals of Internal Medicine,* November, 1953, and published in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

H. E. Madalin, M.D., Detroit, is the author of an article entitled "Anaphylactoid Reaction Following Use of a Penicillin Lozenge," digested from THE JOURNAL of the Michigan State Medical Society, January, 1954, in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

Alfred H. Whittaker, M.D., F.A.C.S., F.I.C.S., Detroit, and William D. Butt, M.D., Toronto, Canada, are the authors of an article entitled "Some Observations on the Treatment of Burns" published in *The Journal of the International College of Surgeons,* March, 1953.

Alfred H. Whittaker, M.D., Detroit, is the author of an article entitled "Treatment of Burns by Excision and Immediate Skin Grafting" published in *The American Journal of Surgery,* March, 1953.

Robert J. Bolt, M.D., and H. Marvin Pollard, M.D., Ann Arbor, are the authors of an article entitled "Combined Use of Antibiotics and Chemotherapy in Ulcerative Alimentary Disease" published in the *University of Michigan Medical Bulletin,* February, 1954.

Carey P. McCord, M.D., Ann Arbor, is the author of the sixth of a series of articles entitled "Lead and Lead Poisoning in Early America" published in *Industrial Medicine and Surgery,* March, 1954.

Plinn F. Morse, M.D., Detroit, is the author of an article entitled "Pathology and its Role in Ophthalmology and Otolaryngology" reprinted from the *Transactions, American Academy Ophthalmology and Otolaryngology,* January-February, 1953, in *Harper Hospital Bulletin,* November-December, 1953.

Kenneth R. Magee, M.D., and Russell N. DeJong, M.D., Ann Arbor, are the authors of an article entitled "Antispasmodic Compound 08958 in Treatment of Paralysis Agitans," condensed from *The Journal of the American Medical Association,* October, 1953, in *American Practitioner and Digest of Treatment,* February, 1954.

Cyrus C. Sturgis, M.D., Ann Arbor, was the moderator for "Panel Discussion: Blood Dyscrasias" presented before the Baltimore City Medical Society, January 16, 1953, and published in the *Maryland State Medical Journal,* February, 1954.

Lynn A. Ferguson, M.D., James A. Ferguson, M.D., Benjamin R. Van Zwalenburg, M.D., and Edward F. Ducey, M.D., Grand Rapids, are authors of an article entitled "Clinical X-Ray Staff Conferences on the Colon," presented before the Eighteenth Annual Convention of the National Gastroenterological Association, Los Angeles, California, October 12, 13, 14, 1953, and published in *The American Journal of Gastroenterology,* March, 1954.

A. H. Whittaker, M.D., Detroit, is the author of a biography of the late James T. Whittaker, M.D., of Cincinnati, which was published in the *Ohio State Medical Journal,* February, 1954.

* * *

Richard S. Hahn, M.D., of the Department of Thoracic Surgery of the University Hospital, Ann Arbor, Michigan, was on March 29, 1954, named by the Rhode Island Medical Society as the 1953 winner of the Caleb Fiske Essay Award, the nation's oldest medical essay competition. His prize winning essay was on "Recent Advances in Cardiac Surgery," and he became the 72nd prize essayist in a competition instituted in 1834.

He will present his latest medical paper at the 143rd Annual Meeting of the Rhode Island Medical Society in Providence on May 5, 1954.

A Benjamin Swig Fellow in Experimental Surgery in 1952, and holder of a Heart Traineeship at the National Heart Institute last year, Dr. Hahn has trained in

(Continued on Page 582)

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(Continued from Page 580)

general and thoracic surgery at the Western Reserve University in Cleveland, Ohio, under Dr. Claude S. Beck, at Stanford University in Palo Alto, California, under Dr. Emile Holman, and presently at the University of Michigan under Drs. John Alexander, Cameron Haight, and Frederick Coller.

* * *

Action taken by the Medical Staff of the Battle Creek Sanitarium Hospital, February 26, 1954: "Medication and treatment orders shall carry with them a termination date, otherwise they will be discontinued at the end of forty-eight (48) hours and shall continue being discontinued until rewritten or otherwise specificially ordered."

* * *

Grants to support research projects being conducted in eleven universities were announced recently by Eli Lilly and Company. The University of Michigan was one of the institutions benefiting from the Lilly grants, when a renewal of support for work was made to Robert C. Elderfield, M.D., department of chemistry for Mr. Orville McCurdy on the synthesis of compounds related to the alstonia alkaloids.

* * *

Notice sent to parents of children taking athletics at the W. K. Kellogg School at Hickory Corners, Mich.:— "We insist that you be covered by some kind of insurance or bring a letter from home informing us that your parents are aware of the risk you are taking. If you have Blue Cross insurance you are probably well covered, few other insurance policies cover high school athletics."

* * *

The Annual 1954 Conference of the seventy-eight Blue Shield plans has studied and endorses the basic objectives of the President's message to Congress on Health insurance matters. It believes in the encouragement of experimentation and expansion in the field of voluntary health insurance.

The Plans recognize and appreciate the sincere intent of President Eisenhower's administration to make adequate health coverage available to more people by "encouraging and stimulating the expansion of voluntary health programs."

With these premises in mind, the Blue Shield Plans have given careful consideration to the Administration's reinsurance proposal and has come to the conclusion that it may well be unnecessary with respect to Blue Shield Plans for the following reasons:

1. An outstanding characteristic of Blue Shield Plans is that they have experimented and pioneered in a totally new concept of medical protection and have demonstrated their ability to stand on their own feet financially.

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of the most successful Blue Shield Plans in operation today were subsidized in this manner by their sponsoring physicians during their early days of experimentation in an unexplored field.

3. In but a few short years, Blue Shield Plans have made remarkable progress in both the extension of enrollment and the extension of benefits. At present Blue Shield Plans have an enrollment of over 29 million people. Having come through the early critical period there is no reason to expect that they will now need to rely upon anything other than their own proven resources as they continue to expand their operations in accordance with the reasonable expectations of the public.

Unanimously adopted by the National Conference of Blue Shield Commission, April 8, 1954, New York.

* * *

Committee to Study Intern Problem.—Acting on a resolution adopted by the AMA House of Delegates at its June meeting in New York, Speaker James R. Reuling recently appointed a committee of five to study the intern problem.

Members of the committee are: Drs. George S. Klump, Williamsport, Pa., chairman; Abraham H. Aaron, Buffalo, N. Y.; H. Russell Brown, Watertown, S. D.; George A. Earl, St. Paul, Minn., and William A. Hyland, Grand Rapids, Mich.

The committee already has held a preliminary telephone conference and tentatively set April 24 as the date for its first official meeting. The session will be held at AMA headquarters.

Many of the present problems involving internship stem from the discrepancy between the number of internships offered in approved hospitals and the number of available applicants. As a result, hospitals, particularly those of smaller size and without medical school affiliation, have had difficulty in filling their house staff requirements. It is anticipated that the committee will give consideration to this and related problems.—*AMA Secretary's Letter.*

NEW ADDRESS

Michigan State Board of Registration in Medicine, 118 Stevens T. Mason Building (New State Building), West Michigan Avenue, Lansing 26, Michigan.

J. Earl McIntyre, M.D., Executive Secretary. Telephones: Capitol Exchange 5-8144, Ext. 2862-63—Saturday afternoon and night line 2-6084.

Norman F. Miller, M.D., Ann Arbor, was guest speaker at the Allegan County Medical Society meeting of May 11 on "Terminal Care for the Gynecological Cancer Patient." This meeting was the "prize" gained by the Allegan County Medical Society for sending the greatest percentage of members to the September, 1953 MSMS Annual Session. The Michigan State Medical Society agreed to furnish any speaker in the United States or Canada, selected by the county medical society which sent the greatest percentage of membership

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to the 1953 Annual Session. Allegan County Medical Society sent 82.6 per cent of its members to the Grand Rapids meeting last autumn.

* * *

Russell R. deAlvarez, M.D., University of Washington Medical School, Seattle, and J. Robert Wilson, M.D., Temple University School of Medicine, Philadelphia, have accepted invitation to be on the program of the Clara Elizabeth Fund Lectures, Genesee County Medical Society, Wednesday, November 3, 1954, in Flint. The name of the pediatrician-member of the team will be announced in a subsequent number of JMSMS.

All members of the Michigan State Medical Society are invited by the Genesee County Medical Society to attend the November 3 Lectures, to be held in Flint.

* * *

The Straith Memorial Hospital, including the Straith Clinic, was opened at 2605 W. Grand Blvd., Detroit, on April 1. The Straith Hospital is a memorial to the late Dr. Samuel Straith who 50 years ago pioneered in the specialty of exodontia and oral surgery in Detroit.

* * *

Bon Secour Hospital, Grosse Pointe, Michigan, has for its Committee on Arrangements for the Annual Clinic Day, June 8, 1954, E. G. Aldrich, M.D., D. N. Sweeny, Jr., M.D., N. M. Taylor M.D., J. F. Wenzel, M.D., and J. B. Woolfenden, M.D., all of Detroit.

* * *

The American Congress of Physical Medicine and Rehabilitation announces its 32nd annual scientific and clinical session, Statler Hotel, Washington, D. C., September 7-11, 1954. For information and program write the Congress at 30 N. Michigan Avenue, Chicago 2, Illinois.

* * *

The Pan-Pacific Surgical Association announces its Sixth Congress in Honolulu, Hawaii, October 7-18, 1954. For information and program, write F. J. Pinkerton, M.D., Suite 7, Young Bldg., Honolulu.

* * *

"How to Select a Family Doctor" is the title of a public service advertisement being sponsored by Parke, Davis & Company, Detroit. For copies of this very worthwhile advertisement containing three important suggestions on how to select a doctor of medicine, write

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* * *

The Genesee County Medical Society's ninth Annual Cancer Day attracted over 300 M.D. registrations. Speakers were Emerson M. Day, M.D., of New York, Eugene P. Pendergrass, M.D., of Philadelphia, Frederick A. Coller, M.D., of Ann Arbor, Osborne A. Brines, M.D., of Detroit, and Howard C. Taylor, M.D., of New York.

William Bromme, M.D., Detroit, Chairman of the MSMS Council, chairmanned the morning session; the afternoon chairman was Harry M. Nelson, M.D., Detroit, Director and Past President, American Cancer Society.

The dinner speaker was Leonard A. Scheele, M.D., Surgeon General, United States Public Health Service, Washington, D. C.

* * *

The Sixth International Cancer Congress will be held in São Paulo, Brazil, July 23-29, 1954. For program and information on transportation and hotel arrangements, write Brewster S. Miller, M.D., Director, Professional Education Section, American Cancer Society, 47 Beaver Street, New York 4, N. Y.

* * *

Looking Back: In 1924, soldiers' bonus certificates were voted, even over a Coolidge veto. A man in Russia named Lenin dies and an unknown by the name of Stalin takes over. Japanese immigrants barred from the United States. Al Smith and McAdoo fight a deadlock for the Democratic nomination with the result that Davis is nominated who is easily defeated by Coolidge.

1934: Dollar devalued to raise prices, without result. "Okies" move from the dust bowl. Huey Long brings his "share the wealth" to the nation. Much talk of "underprivileged" and the rise of the social workers. A national deficit for five years worries some people!

1944: The War is still long and painful but war production is zooming. Draft and rules and regulations and rationing. Strikes. Casablanca, Yalta, and Potsdam meetings are held—their imprint will affect the world for centuries; Congress objects to secrecy, suspects deals especially at Yalta. U.N. born in San Francisco, April, 1945—with high hopes. Roosevelt elected to his fourth term (defeating Dewey). Senator Truman of Missouri becomes Vice President.

* * *

The Chicago Medical Society announces a special all air transportation plan to the AMA convention in San Francisco, with a tour of the Hawaiian Islands following. The takeoff from Chicago is scheduled for June 20 with arrival in San Francisco on the same day. The party will leave for Hawaii midnight June 25 from San Francisco. Return from Honolulu, midnight July 4 with arrival in Chicago on July 5. If interested in more information or reservations, write Elmer V. McCarthy, M.D., Chairman, 86 E. Randolph St., Chicago 1, Ill.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, June 7, August 9
Surgical Anatomy and Clinical Surgery, two weeks, June 21
Surgery of Colon and Rectum, one week, June 7
Thoracic Surgery, one week, June 7
Esophageal Surgery, one week, June 14
General Surgery, two weeks, July 26
Fractures and Traumatic Surgery, two weeks, June 7

GYNECOLOGY—Office and Operative Gynecology, two weeks, June 7
Vaginal Approach to Pelvic Surgery, one week, June 21

OBSTETRICS—General and Surgical Obstetrics, two weeks, October 4

MEDICINE—Two-week Course, September 27
Electrocardiography and Heart Disease, two weeks, July 12
Hematology, one week, June 14

RADIOLOGY—Clinical Diagnostic Course, by appointment
Clinical Uses of Radio Isotopes, two weeks, June 7
Radiation Therapy, by appointment

PEDIATRICS—Cerebral Palsy, two weeks, June 14
Congenital and Rheumatic Heart Disease in Infants and Children, one week, October 11 and October 18
Two weeks, October 11

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* * *

The Third International Poliomyelitis Conference will be held at the University of Rome, Rome, Italy, September 6-10, 1954. Among the participants are James L. Wilson, M.D., Ann Arbor.

WHAT THEY THOUGHT OF THE 1954 MICHIGAN CLINICAL INSTITUTE

Guest Speaker Friedrich W. Niehaus, M.D., Omaha, Nebr.: "I thoroughly enjoyed my stay and am very grateful to you for inviting me to this meeting. My ubiquitous host, Dr. Nelson Taylor, and his wife were excellent hosts and left nothing undone."

Guest Speaker J. H. Warvel, M.D., Indianapolis: "I was never so royally treated in all my life. Certainly every wish that your guest speakers could make were taken care of by your most excellent hosts. I enjoyed myself very much and want to say it was a real treat to spend the day in your city at the Michigan Clinical Institute."

Guest Speaker Bentley P. Colcock, M.D., Boston: "I would like to say that I have seldom seen a better organized meeting and my host, E. R. Sherrin, M.D., was perfectly wonderful. All of you could not have done more for your guests and I do hope the Michigan Clinical Institute proved to be a successful meeting."

Guest Speaker Reginald G. Bickford, M.D., Rochester, Minn.: "I would like to take this opportunity of expressing my thanks for the unique hospitality that I enjoyed from members of your organization during my stay at the Michigan Clinical Institute in Detroit."

Guest Speaker Albert B. Sabin, M.D., Cincinnati: "I want to take this opportunity to thank you for your fine hospitality and especially for that fine basket of fruit which I found in my room at the Sheraton-Cadillac Hotel, Detroit, during the Michigan Clinical Institute."

Guest Speaker Eugene P. Pendergrass, M.D., Philadelphia: "I want to thank you for the part that you played in making my trip to Detroit such a pleasant one. I notice that the scroll that I received from the Michigan State Medical Society has your name inscribed thereon as President of the Society. I treasure this very, very much."

BEAUMONT MEMORIAL CONTRIBUTORS

(Continued from Page 561)

Kenneth VandenBerg, M.D., Pontiac.
Henry J. VanderBerg, Jr. M.D., Detroit.
Mrs. Spencer H. Wager, M.D., Monroe; Lyle G. Waggoner, M.D., Detroit; James J. Waring, M.D., Denver, Colorado; Casimir P. Weiss, M.D., Detroit; Robert R. Wessels, M.D., Birmingham; Thomas W. Wharton, M.D., Wyandotte; Don White, M.D., Lincoln Park; R. Hamilton White, M.D., Birmingham; Jack E. Wich, M.D., Traverse City; Morton J. Wiener, M.D., Detroit; A. L. Wood, M.D., Dearborn.
Joseph J. Worzniak, M.D., Wyandotte.
Myron R. Zbudowski, M.D., Detroit.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

GRIST OF A DECADE. From the pen of A. C. Pfeifer, M.D., in the Bulletin of Genesee County Medical Society, 1942-1952. Flint, Michigan: Genesee County Medical Society, 1953.

As a tribute to its retiring president, the Genesee County Medical Society published this little book, a collection of the writings of A. C. Pfeifer, M.D., who preceding his term as president had served eleven years as editor of the *Bulletin of the Genesee County Medical Society*. Many times during those years we had read his caustic and timely editorials. Sometimes we quoted from them. This little collection in one bound volume is indeed a tribute, and we have been privileged to scan again the offerings of many years, profound thought, rare humor, and withal pleasant reading.

W.H.

THE ALLERGIC CHILD. Harry Swartz, M.D. New York: Coward-McCann, Inc., 1953. Price $3.95.

This book is aimed at the parents of 20 million allergic children in the United States. The alleged purpose is to help educate parents to get children suffering from allergy treated for allergy and not epilepsy, acne, behavior problems, otitis media, et cetera.

The total effect of this type of literature is hard to evaluate. The book would be extremely helpful if prescribed by the doctor to selected patients, but probably dangerous for a nervous mother.

R.S.S.

MUSIC THERAPY. Edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, N. Y. New York: Philosophical Library, 1953. Price $6.00

The title of this book brings up the question of whether music actually is therapy. It has been known since ancient times that, depending on the type, music has either a stimulating or a soothing effect. The author with a large group of contributors has compiled a rather complete discussion of the effects, methods and utilization of this medium for the benefit of the ill. The introduction reports historical incidences and observations on the use of music. There are thirty-three short chapters by different contributors on such subjects, viz: The organization of a musical program, music therapy in anxiety states, in mania, in depressions, for schizophrenia, for emotional fatigue, tension headaches, in emotional high blood pressure, for gastric and heart disturbances, in operating rooms, in military medicine, et cetera. For each of these conditions types of music and selections are prescribed.

This is a small volume and yet it is complete in providing suggestions for the setting up and conduction of a musical program in institutions or hospitals.

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THE JEALOUS CHILD. By Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, New York. New York: Philosophical Library, 1953. Price $3.75.

It appears to be the aim of this book to be a "best" or good seller. It is written in language that can be easily understood by laymen. The author has not limited himself to the subject matter; instead, he presents psychological factors that may occur in different diseases or illnesses. In it, there is really nothing new nor does it contain material that has not been presented innumerable times in the literature. Because of thsee findings, this small volume hardly warrants enthusiastic endorsement.

G.K.S.

SCHOOL HEALTH SERVICES. A Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association with the co-operation of contributors and consultants. Charles C. Wilson, M.D., Professor of Education and Public Health, Yale University, Editor. Chicago: National Education Association and American Medical Association, 1954. Price $5.00.

This is an eighteen-chapter textbook discussing modern health services to school-age children. It is designed primarily for teachers, nurses and public health workers.

Methods of screening and assessing general health, vision, hearing, dental health, and mental health are discussed, as well as the administrative aspects of the screening techniques.

Considerable space is given to procedures for improving follow-up. The need for community interest and support for solving the broad problems of school-age health is emphasized.

There are chapters discussing special problems, such as epilepsy and heart disease, emergency care and first aid, communicable disease control and school sanitation.

This is an authoritative volume useful to physicians who work as school doctors or advisors or who are involved in developing or changing school health services. It should be of particular use to the school health and public health committees of the local medical society.

W.J.M.

CLINICAL ENDOCRINOLOGY. By Karl E. Paschkis, M.D., Associate Professor of Medicine, Assistant Professor of Physiology, Director of the Division of Endocrine and Cancer Research, Jefferson Medical College; Chief of Endocrine Clinic, Jefferson Medical College Hospital; Attending Endocrinologist, St. Christopher's Hospital for Children, Philadelphia, Pa. Abraham E. Rakoff, M.D., Clinical Professor of Obstetric and Gynecologic Endocrinology, Jefferson Medical College; Endocrinologist to the Hospital Laboratories, Jefferson Medical College Hospital; Guest Lecturer in Gynecic Endocrinology, Department of Internal Medicine, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa. Abraham Cantarow, M.D., Professor of Biochemistry, Jefferson Medical College; formerly Associate Professor of Medicine, Jefferson Medical College and Assistant Physician, Jefferson Medical College Hospital, Philadelphia, Pa. With 253 Illustrations, 5 in Full Color. New York: Hoeber-Harper, 1953. Price $16.00.

This publication is the work of three authors, all of Jefferson Medical College in Philadelphia. All have substantial clinical as well as academic backgrounds, in



physiology, clinical medicine and biochemistry respectively, and have worked and taught together for a number of years.

The endocrine glands are presented separately under ten different sections. One section is devoted to the subject of obesity and the final section is devoted to methods of study and to a listing of commercial endocrine preparations. In each section embryology, anatomy, histology, physiology, pathology, pathological physiology, diagnosis and treatment are taken up in logical sequence. The rationale behind diagnostic and therapeutic methods is likewise discussed. Differential diagnosis and the inter-relationships between the various endocrines are discussed in each instance. A list of references follows each section. A complete and useful index is included at the end of the text.

Adequate illustrations accompany the text, portraying typical diseases and conditions found in clinical practice, with an easily readable print, written in an interesting style with logical development.

This is an excellent work, both for the student and for the practicing clinician as well. Methods of diagnosis and treatment, bolstered with the underlying rationales from the viewpoint of pathologic physiology, are presented in a concise manner, making the text useful as a source of ready reference.

It seems to be a work well done, carefully thought out by teachers of experience, and can be recommended for the reference shelf of any physician, by virtue of its eminent readability.

R.W.B.

RISING COSTS OF THE HEALTH SERVICE PLAN

(Continued from Page 556)

order everything in the book in the way of laboratory and pharmacy service; and you will pay scant attention to the length of the patient's hospital stay. Thereby you will speed the entire plan toward insolvency.

But if you are mindful of the purposes of voluntary health insurance, protection of the patient against overwhelming costs, and the privilege of hospitalizing him when necessary, you will measure the individual need carefully, remembering that the cost still comes out of the patient's pocket. Thereby you will enlarge the entire service for more people at lower costs; and you will postpone the day, perhaps indefinitely, when paternalistic forces may move into the field.

We doctors have in voluntary health insurance both a plough-share and a sword. We serve the people and at the same time fend off poachers in the field of health service. If we fail to recognize the dual virtues of our health service plans and do everything we can to promote their growth both the public and the profession will be the losers.

WILLIAM S. REVENO, M.D.

Communication

L. W. Hull, M.D.
President, Michigan State Medical Society
Detroit, Michigan
Dear Doctor Hull:

At the October 23 meeting of the Board of Commissioners of the State Bar of Michigan, unanimous approval and commendation were given to the April, 1953, issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Your magazine carried a beautiful cover, most appropriate for the occasion in which your great association and the State Bar collaborated on printing the same material in their respective publications.

The State Bar's governing body salutes the Michigan State Medical Society and its progressive editorial policy.

Yours very sincerely,
RICHARD H. PAULSON
President, State Bar of Michigan

Nov. 27, 1953

* * *

Michigan State Medical Society
4421 Woodward Avenue
Detroit 1, Michigan
Gentlemen:

Your letter of January 21, including a copy of the March JOURNAL of the Michigan State Medical Society, is at hand. You may wish to know that the request for a copy of this JOURNAL came to Parke, Davis & Company among other requests from a doctor in Italy. Evidently, information regarding your articles in the JOURNAL reaches Italy and, consequently, this request. We will forward this JOURNAL with the other material which has been requested from Parke, Davis & Company.

I want to express my appreciation for your kindness in sending this copy.

Sincerely,
HARVEY M. MERKER, Sc.D., Eng.D.
Director of Scientific Relations
Parke, Davis and Company

Detroit, Michigan
January 22, 1954

* * *

William Bromme, M.D.
Detroit, Michigan
Dear Dr. Bromme:

Both personally, and on behalf of the Woman's Auxiliary to the Wayne County Medical Society, I wish to thank you for coming to us yesterday. We know that it entailed adding one more task to an already overflowing schedule, and we are indeed grateful.

I feel that your presentation of this highly controversial subject was excellent public relations for the Medical profession for several reasons. Firstly, our Auxiliary members should be alerted to the issues involved and informed of the viewpoints of the Medical Society; secondly, our guests came from a widely diversified group of women's organizations in Wayne County, and so you were able to present the viewpoints of Medicine to areas of our population difficult to reach in any other way.

During the tea hour it was most heartening to receive many favorable comments about your talk, and I know that you were instrumental in creating a climate which is favorable to good public relations for the Medical Society.

With kindest personal regards, I am,

Sincerely yours,
MRS. WILLIAM MACKERSIE
Public Relations Chairman
Woman's Auxiliary to MSMS

Detroit, Michigan
March 13, 1954

Classified Advertising

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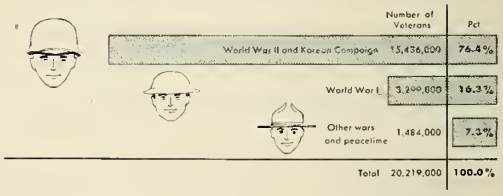
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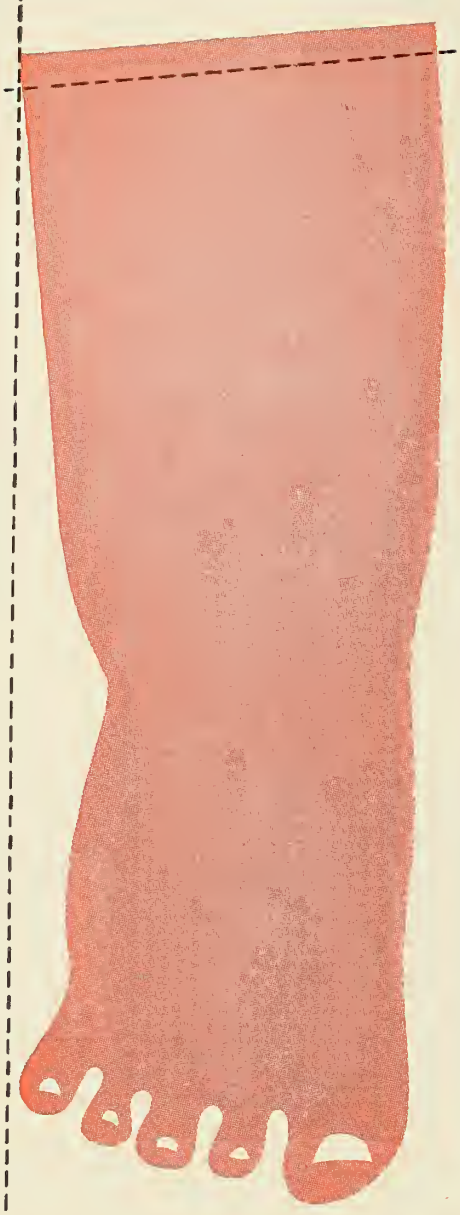
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Norman F. Miller, M.D.



Harrison Sadler M.D.

MSMS

ANNUAL SESSION

Sheraton-Cadillac Hotel

DETROIT

September 29-30-October 1

1954

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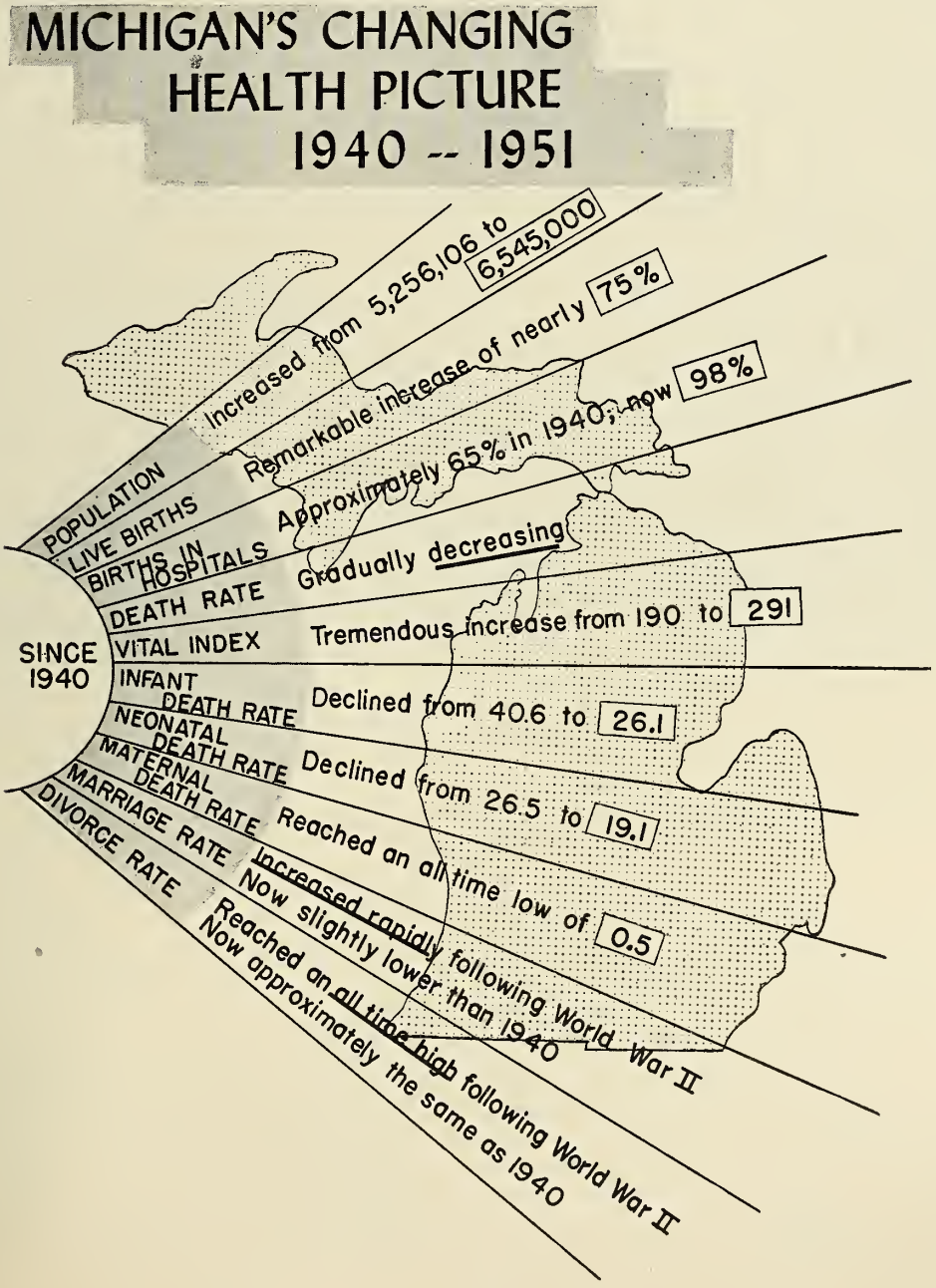
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E. P. Vary, M.D.....608 First National Bldg., Flint

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O. O. Beck, M.D.....280 Maple Ave., Birmingham
William Bromme, M.D.....10 Peterboro, Detroit
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You and Your Business

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION

Sheraton-Cadillac Hotel, Detroit

Wednesday-Thursday-Friday, September 29-30-October 1, 1954

You are urged to attend!

NEW OAKLAND HOSPITAL NAMED "BEAUMONT"

Oakland County's new general hospital at 13 Mile Road and Woodward Avenue has been named for Doctor William Beaumont, pioneer physiologist who won fame by peeping through a window—in another man's stomach.

The trustees of the new hospital in Oakland County decided on "Dr. Beaumont Hospital" as its name as a tribute to his contributions to medicine.

MICHIGAN SOCIETY OF NEUROLOGY AND PSYCHIATRY

Research Award

This is awarded annually for the outstanding piece of research in: neurology, psychiatry, neurosurgery, neuropathology, neurophysiology, neuroanatomy, pharmacology pertaining to the nervous system, and other allied fields of interest . . . provided that the research is of sufficient merit. Besides the honor of the achievement of the Award itself, there is a cash prize of $250. Following are the rules which govern the competition:

1. The final date before which papers must be submitted in order to receive consideration for an Award shall be the first day of March.
2. Five copies of the paper shall be submitted.
3. The work must be submitted within one year following the completion of the research reported.
4. To receive consideration, the work shall have been accomplished by individuals within the first five years of specialty training or experience.
5. The date for making the formal Award shall be that of the last meeting of the year of the Society.

The winner's name each year shall be forwarded by the Committee to the press and to scientific journals for publication as information which would reflect credit to the winner, the profession and the Society.

Competition is open to workers living in Michigan, north-central Ohio in the area contiguous to the southern border of Michigan, and the Province of Ontario, Canada, in the area contiguous to the State of Michigan.

The widespread dissemination of this information among young workers in these fields is most desired and will be appreciated.

Any further information desired may be obtained by addressing a letter to: Ivan C. Berlien, M.D., Chairman, 1753 Guardian Building, Detroit 26, Michigan.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of April 1, 1954

- Eighty-one items were presented to the Executive Committee of The Council at its April 1 meeting. Chief in importance were:
- **Polio vaccine motion:** the Executive Committee of The Council cannot recommend the use of Salk vaccine for infantile paralysis until we have further assurance of its safety and that it will not in any way damage our children in the immediate or foreseeable future; that a copy of this action and necessary explanatory material be sent promptly to the president and secretary of all component county medical societies in Michigan and to the Michigan Health Commissioner. This motion was carried unanimously.
- **Committee reports.** The following committee reports were presented (a) Special Committee with American Legion, meeting of March 12; (b) Beaumont Memorial Committee, March 12; (c) Permanent Conference Committee, March 17; (d) Ethics Committee, March 17; (e) Joint Commission on Venereal Disease Reporting, March 18; (f) Medical Advisory Committee to Michigan Hospital Service, March 24; (g) Advisory Committee to Michigan State Medical Assistants Society, March 21; (h) Iodized Salt, March 23; (i) Tuberculosis Control, March 25; (j) Committee on Arbitration, March 26.
- **President L. W. Hull, M.D.,** Detroit, was authorized to represent the Michigan State Medical Society at the Ontario Medical Association's Annual Meeting in Toronto in May.
- **Margaret S. Hersey, M.D.,** Kalamazoo, was appointed to the Maternal Health Committee.
- **Council Chairman William Bromme, M.D.,** De-

(Continued on Page 602)



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IMPRESSIVE RESULTS: A recent review[1] emphasizes that hormonal therapy has provided either marked or complete control of symptoms in approximately 85 per cent of patients with refractory acute bronchial asthma.

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1. Thorn, G. W., *et al.*, *New England J. Med.* **248**:632, April 9, 1953.

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All HYDROCORTONE Tablets are oval-shaped and carry this trade-mark: 

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 600)

troit, reported on the March 21 meeting in Indianapolis of the AMA Committee on Veterans' Medical Care (non-service connected disabilities).

- **MSMS health and accident insurance program:** the Executive Committee instructed that the names of all new MSMS members routinely be referred to the Provident Life and Accident Insurance Company, so that invitation to take advantage of this plan may be issued.
- **Request of United Health and Welfare Fund** that MSMS create an Evaluation Committee to aid the Fund in its budget surveys was presented and the following committee was appointed: R. H. Baker, M.D., Pontiac, L. Fernald Foster, M.D., Bay City and G. W. Slagle, M.D., Battle Creek.
- **Invitation to MSMS to serve** as a participating agency in the "Conference on Aging—Everybody's Business" sponsored by Institute for Human Adjustment, Division of Gerontology, University of Michigan, was presented; the Secretary was instructed to advise that MSMS definitely is interested in the subject of this working conference but that its idea of sponsorship implies an active part in planning the program and in leading technical advice as needed; that MSMS does not choose to be a sponsor of any program in which it does not have the responsibilities or privileges of a sponsor.
- **Improvements at 606 Townsend, Lansing.** Landscaping; painting exterior trim of building, and installation of intercom phone system were authorized in the MSMS headquarters.
- **Committee report on vacation-sickleave-overtime** policy for MSMS employes was presented, discussed and approved.
- **Progress report of Rheumatic Fever** Coordinator Leon DeVel, M.D., Grand Rapids, was presented and approved.
- **Progress report of Public Relations** Counsel H. W. Brenneman included report on legislation of interest to the medical profession; practice of psychotherapy by lay persons; work of AMA Public Relations Advisory Committee; and attendance at Chamber of Commerce meeting in Washington, D. C.
- **Report of B. M. Masters, M.D., Fremont,** on National Rural Health Conference was presented and referred to Editor Wilfrid Haughey, M.D., for publication in JMSMS; thanks were extended to Dr. Masters for his valuable report.
- **Matters of mutual interest** were discussed with State Health Commissioner Heustis.
- **Legal Counsel J. Joseph Herbert** reported on two legal matters of interest to the medical profession.
- **A rising vote of thanks** was extended to Dr. and Mrs. D. Bruce Wiley and their daughter Donna, for acting as hosts to the Executive Committee on this occasion.

UNIFORM CLAIM FORMS

More than 100 million persons in the United States now are protected by one or more kinds of health insurance*, according to the latest estimates. Of this number more than 50 million are covered by the insurance companies. This compares with only about 20 million persons covered by insurance companies as recently as 1947.

This heartening development naturally has resulted in creation of new problems, one of the chief of which is how to perfect a set of uniform claim forms and get them into general use. The fact that more than 10 million accident and health claims are handled yearly emphasizes the importance of this problem.

The forms used to support these claims in surgical and medical insurance alone lead to almost $300,000,000 yearly, finding its way into medical care channels. Because new policyholders are being insured daily, the number of forms receiving attention from doctors in the aggregate will not diminish, but there is real hope that the problem of filling out these forms can be made less burdensome.

The health insurance industry has worked for a considerable period to arrive at uniformity of claim forms used to obtain needed information from physicians, hospitals and clinics. An extensive, all-industry effort toward the goal of uniformity of language and brevity and simplicity, began in April, 1953, under the leadership of the Health Insurance Council. The membership of this Council consists of nine associations interested in the health insurance field. More than 600 insurance companies are affiliated with one or more of the nine associations. The companies handle more than 85 per cent of the health insurance written by insurance companies in the United States.

The progressive development of health insurance resulted, of course, in an increasing variety of forms with differences in length and wording

*The expression "health insurance" in this memorandum refers both to health and accident insurance.

Recognition of the need to clarify the situation has been spearheaded by one of the Council's members, the International Claim Association. This is composed of personnel which constantly works and lives with claims problems.

The membership of the International Claim Association is highly representative of its field. It has made studies to find out what information is needed. In this endeavor it has had considerable help from various companies in its drafting of claim forms.

A special Committee on Uniform Claim Forms, created by the Health Insurance Council, intensified and broadened the industry's efforts about a year ago. This committee, working in co-operation with representatives of the various associations, is acting on behalf of all segments of the health insurance industry.

The program includes the preparing of satisfactory claim forms and helping to get them used on a nationwide basis.

A group hospital insurance uniform claim form was prepared about two years ago and now is in general use in many parts of the country.

Five attending physician's statement forms for use on claims under regular life and group life insurance have received broad company consideration and are now in final draft. Four of them are for disability—two initial and two continuing disability—and one for death claims. The fact that more than 85 per cent of the companies in the United States and Canada participating in a study of the forms have agreed to use them has demonstrated what can be accomplished in the way of a uniform claim forms program.

Additional forms are in preliminary draft form.

A program for arriving at a series of uniform claim forms involving more than 600 companies is a substantial undertaking. Much already has been accomplished, but still more time is needed to come up with the soundest answers. The importance of this project can be envisioned when one realizes that hundreds of insurance companies, each with its own versions of forms, run up the variations into very high figures.

One of the first requirements is to settle upon forms which are reasonably brief and simply and clearly worded, as well as being adequate from the standpoint of sound insurance principles and practices.

Naturally the work on the final uniform claim forms will have the benefit of consultation with hospital and medical groups both at the national and local levels.

Numerous medical and hospital societies have shown interest in the uniform claim forms program. Some of the societies, which had been preparing or planning to prepare programs of their own, have voluntarily held up on their projects to await the results of the industry-wide proposals.

The committee is most appreciative of this because forms prepared locally would inevitably result in variations throughout the country and thus cause a certain amount of confusion. The problems are being approached from an all-industry and nationwide standpoint, with the realization that general uniformity in claim forms is highly desirable for everyone concerned.

The co-operation of physicians and hospitals as well as the insurance people is essential for the maximum success of this project. Also patience, tolerance, and determination to make a program work are necessary.

The Special Committee on Uniform Claim Forms is encouraged by the many inquiries about its program and the interest which is evidenced. Such interest is an encouraging sign that solutions to the difficult problems will be reached.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954

July 17	Beaumont Memorial Dedication	Mackinac Island
July 29-30	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
Sept. 29-30 thru Oct. 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
November 3	Clara Elizabeth Fund Lectures Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	San Francisco

1955

April 13	Tenth Cancer Day Genesee County Medical Society	Flint
May 11	Wayne University College of Medicine Clinic Day and Alumni Reunion	Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.



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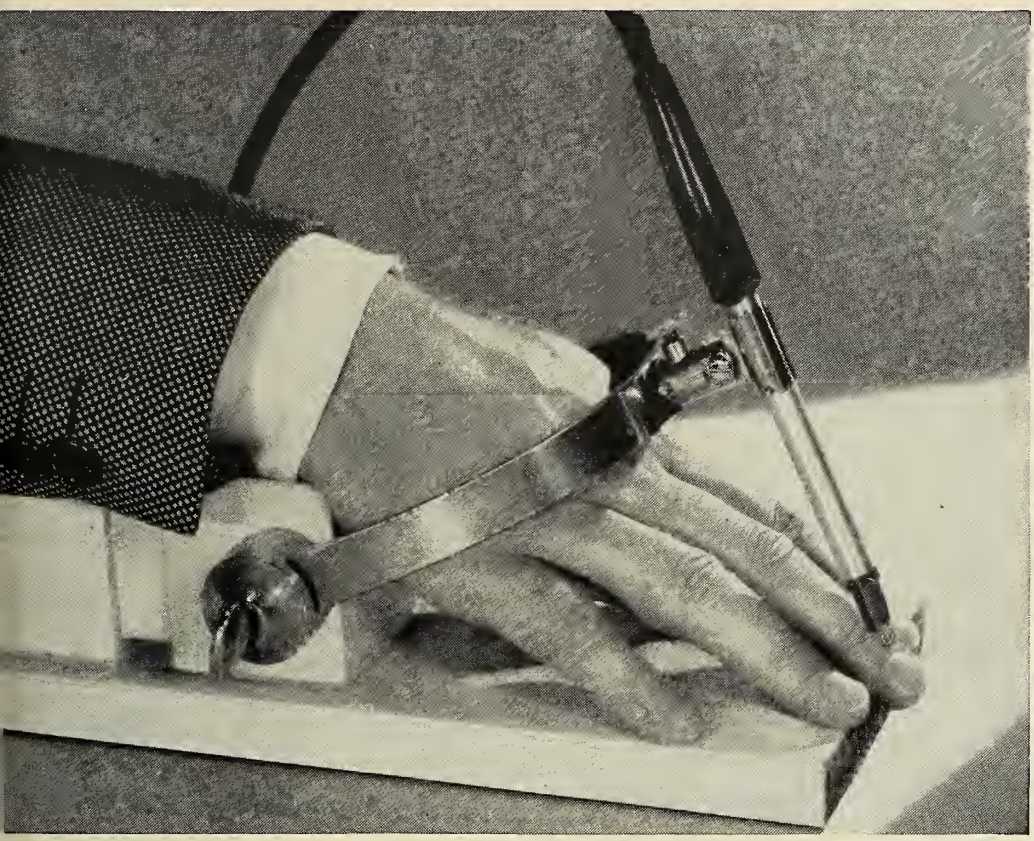
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Cancer Comment

HYDATID MOLE AND CHORIOCARCINOMA

Choriocarcinoma and its questionable relative, the hydatidiform mole, provide one of the most controversial subjects in medicine, and particularly oncology. The etiology is vague and even in the most capable hands the histopathologic identification of positive benignancy or malignancy is difficult and further clouded by spontaneous recovery of apparently hopeless cases. The files of the Mathieu Memorial Chorionepithelioma Registry have been vitiated by the inclusion of erroneously diagnosed cases submitted and the casual reader is confused by the voices of authority presenting diametrically opposed opinions on diagnosis, prognosis, and treatment.

Two factors serve to complicate the problem: First, the tumor is derived from the fetus and not the cells of the patient; and second, the physiologic trophoblastic penetration of the placenta into the myometrium and blood vessels in pregnancy closely simulates a malignant process.

The relationship of the so-called hydatidiform degeneration to moles and choriocarcinoma is interesting although some consider this a physiologic alteration of the ovum and not pathologic. This process, even in a localized form, is seen in four per cent of all pregnancies and in two-thirds of all spontaneous abortions occurring in the second and third months of gestation. The normal developing fetal circulation becomes functional at the fifth week, and this is the time the hydatid changes are first noted. The ovum in half of these aborta is absent or abnormal suggesting that the lack of a normal fetal circulation results in an accumulation of intravillous fluid with production of edematous and cystic changes. Age and parity are alleged to play no role in this, but some have found them three times as frequent in the multiparous. Moles follow abortions and miscarriages in 75 per cent of the cases with only 25 per cent accounted for by full-term pregnancies. Despite the controversial phases of the problem, it is easier to consider the mole as merely a more aggressive and serious development of hydatid degeneration, and the choriocarcinoma as a rare and usually fatal variant of either or both.

It is generally considered that moles occur once in every 2,000 pregnancies but the literature quotes frequencies from 1:240 to 1:20,000. Much of the discrepancy undoubtedly is based on the use of vague and variable criteria in differentiating a mole from hydatidiform degeneration and the indefinable nuances that exist between them. An almost similar difficulty is encountered in distinguishing a benign invasive mole with excessive trophoblastic activity from a choriocarcinoma. It is becoming increasinly evident that the mortality depends more on the criteria used for classification than on the treatment. Few now agree with Ewing that all choriocarcinomas are fatal, for the death rate in recent series varies from 50 per cent to 80 per cent.

Certain terms that are deeply ingrained should be changed; thus, choriocarcinoma is to be preferred to chorionepithelioma and "invasive mole" should be substituted for chorioadenoma destruens. The latter is a histologic misnomer and has been employed by some, after a five-year survival, to indicate that a diagnosis of choriocarcinoma deserved a histopathologic re-evaluation.

Probably less than 2 per cent of moles develop into a choriocarcinoma. Diagnoses based on curettage alone are often unreliable since the more egregious tissues may be buried deeply in the myometrium; therefore, biologic tests should be used as a supplement to check the diagnosis and to follow the clinical progress. Results should not be confused with the high levels of gonadotropic hormone often observed in normal pregnancy between the fifty-sixth day and the seventy-fifth day which drop to a low level at the end of the fourth month. A persistently high titer after the ninetieth day strongly suggests a mole or choriocarcinoma, higher levels being more frequent in the latter. No great reliance should be placed on single biologic tests and if clinical doubt exists they should be repeated every few weeks for a year. The results of pregnandiol tests have been somewhat contradictory in evaluating molar activity.

Treatment has been hard to evaluate but usual-

(Continued on Page 655)



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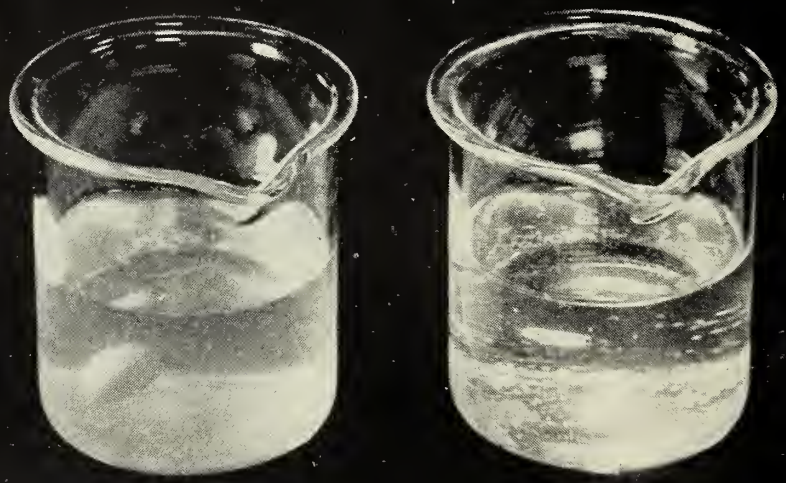
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AMA Washington Letter

THE MONTH IN WASHINGTON

At the request of the Defense department, Congress is considering a bill to expand and make more uniform the medical care program for civilian dependents of military personnel. It could have significant impact on the practice of medicine and on medical economics.

The legislation developed out of the Defense department's Moulton commission report of a year ago. In the intervening months the department's legislative planners called in representatives of the American Medical Association and other professional groups for advice. But the bill finally presented to Congress is evidence that not all differences of opinion were compromised. While in many respects the measure is in line with the policy of AMA on dependent care, at least one basic conflict remains: The department's bill states that dependents should receive private medical care only when military facilities are unavailable or inadequate. The AMA's policy, adopted after long study of the problem, is that dependents should be cared for in military hospitals and by uniformed physicians only when civilian care is inadequate or unavailable.

There is almost complete agreement that the present patchwork dependent medical care program should be changed to make benefits uniform geographically and within the services, and to spell out the benefits in law. The issue is whether the military medical services should care for all qualified civilian dependents, or dependents should, like the rest of the population, get their medical care from civilian physicians and hospitals.

Under the bill, medical care furnished by or underwritten by the federal government would be limited to "diagnosis, acute medical and surgical conditions, contagious diseases, immunization, and maternity and infant care." Dental care would be allowed only in emergencies or as an adjunct to medical care. These restrictions would be waived overseas and at remote stations in the United States.

The definition of "dependents" would not extend beyond parents and parents-in-law, and these relatives would have to receive at least half their support from the military member to qualify.

The Secretary of Defense would decide what charges, if any, to levy against dependents treated at military facilities. When treated privately, the dependents would pay the first $10 cost of any illness, plus not more than 10 per cent of the total cost. The secretary could make use of voluntary health insurance for dependents if this system were found to be more economical.

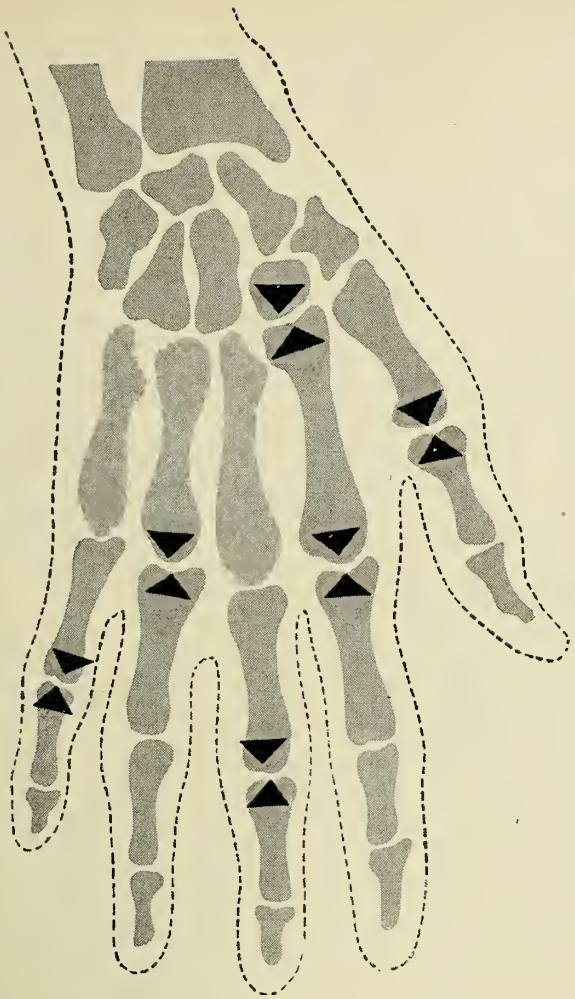
The Senate Armed Services committee was slow to take up the dependent care bill because of a heavy schedule of other hearings. Nor did it make fast progress in the House. There the introduction of the bill was delayed when Chairman Dewey Short (R., Mo.) called on Defense department to furnish him with detailed information on what the new medical care program would cost.

By mid-May, when Congress had about concluded hearings on all major administration health bills, a new factor was introduced. Chairman Wolverton of the House Interstate and Foreign Commerce committee called hearings on his own bill for federal guarantee of private loans to health facilities. This was not part of the original Eisenhower health program, but there were some indications that the administration might get behind it.

As originally drawn, the bill would virtually exclude all clinics and hospitals except those operated in conjunction with prepaid insurance plans. During the hearings, Mr. Wolverton indicated he would be willing to drop this restriction. If this were done, the law then would offer benefits to all — fee-for-service physicians and groups as well as "closed panels."

During this period, some sentiment developed to combine the loan guarantee bill with the reinsurance bill, which wasn't making much progress on its own. The result was a period of confusion

(Continued on Page 616)



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PR REPORT

DEDICATION OF THE BEAUMONT MEMORIAL on Mackinac Island, July 17, a gift from members of the medical profession to the people of Michigan, has been the center of much MSMS interest for many months. The "Beaumont Story" is a great instrument for dramatizing medical progress and the part that American doctors of medicine have played in bringing about that progress. Every effort is being made to take the story to the widest possible audience in Michigan and throughout the nation. The dedication, however, is not the end. The Beaumont Memorial will continue to serve as a symbol for many years to come. Are you planning to attend the dedication? Have you "passed the word" to your friends that this dedication will prove of sufficient interest to them to warrant visiting Mackinac Island on that date? Or, if your friend is active in the communication field, have you suggested that the ceremony is worthy of coverage by his publication or broadcasting station? Your help will be appreciated.

THE COST OF MEDICAL CARE continues to remain proportionately low, in comparison to the cost of other necessities in the family budget. This was graphically illustrated in a chart released to newspapers in connection with the recent economic report by President Eisenhower. When plotted in comparison to the sharp rise in the cost of food, apparel, transportation and the aggregate of all items since 1939, the graph showed a gradual upward curve for medical care which remained far below the peaks reached by the other items. Only rents, held down by artificial controls for more than seven years, show a smaller increase in the fourteen-year period.

WITH LEADERSHIP FROM THE LOCAL MEDICAL SOCIETY, St. Joseph County is the latest to take steps toward replacing the antiquated coroner system with an up-to-date county medical examiner system. The proposition was placed on the August 3, 1954, ballot for approval by voters, after the County Board of Supervisors adopted unanimously a resolution favoring a county medical examiner. The clincher was provided by four members of the St. Joseph County Medical Society who appeared before the supervisors the day the decision was made, but the groundwork had been laid carefully weeks in advance. Using printed materials—some provided by MSMS—and through personal contact, medical society members presented supervisors with the facts and convinced board members of the advantages and importance of establishing a modern system of dealing with cases of accidental, violent and unforeseen death.

Now the medical society has undertaken an educational campaign to inform voters of the benefits.

The Medical Examiner Bill, sponsored by MSMS, was passed by the 1953 Legislature.

In a letter to the MSMS Public Relations Department reporting progress in St. Joseph County, S. Albert Feigel, M.D., of Sturgis, stated: "Again, thank you very much for your help in enabling us to get the approval of our Board of Supervisors." Similar help is available on request to any county medical society interested in bringing the benefits of the county medical examiner system to its community.

MICHIGAN DOCTORS OF MEDICINE have participated wholeheartedly in the numerous hospital expansion campaigns conducted since World War II. For the most part this participation has contributed greatly to better public relations, although in a few communities the vital role played by the medical profession has been misinterpreted or has gone unrecognized. With this in mind it is interesting to note an article in a recent issue of "The Modern Hospital" dealing with M.D.'s and their generosity in hospital campaigns.

Written by a senior staff member of a large professional fund-raising organization, the article states: "The fact is—doctors are generous. This simple and heartening revelation will come as a surprise to a considerable body of laymen. . . . Figures on more than 1,000 hospital campaigns in 245 U. S. cities in the last thirty-three years reveal that the highest per capita contributions to these institutions came from doctors on their staffs. Take any group of businessmen . . . and you find no comparison in the size of giving."

Illustrating the article was a survey of six recent hospital campaigns, which included a campaign in Muskegon where seventy-three doctors of medicine contributed 27.3 per cent of the goal. In the six cities cited this was the highest percentage, while the dollar amount was the second highest per capita.

Because of chemical differences between normal and cancer cells, the latter absorb more of a special dye which glows when exposed to ultraviolet light. This glow can be measured by an electric eye.

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Arthur C. Kittleson, president of the senior class, is fifth from the right in the first row. Nicholas E. Breuer, a Fellow in medicine at the University of Michigan Hospital, is at the extreme left of the third row from the top.

G. E. Tolkemitt, Lilly representative in Ann Arbor, accompanied the group to Indianapolis. He is at the extreme left of the first row.

THE MONTH IN WASHINGTON

(Continued from Page 612)

and uncertainty, with no clear indication of what either the committee or the administration really wanted.

A few other medically important bills were advancing on schedule. The House Ways and Means committee gave every indication of reporting out a bill to require all employers (physicians included) to participate in the federal-state unemployment insurance program. As usual moving faster than the Senate, the House had passed a bill to give state health officers more control over federal grants for public health work. The House also was nearing a vote on extension of the social security program, with no suggestion that physicians and other self-employed groups who don't want coverage would be exempted. The House-approved Hill-Burton expansion bill was waiting action in the Senate.



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Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

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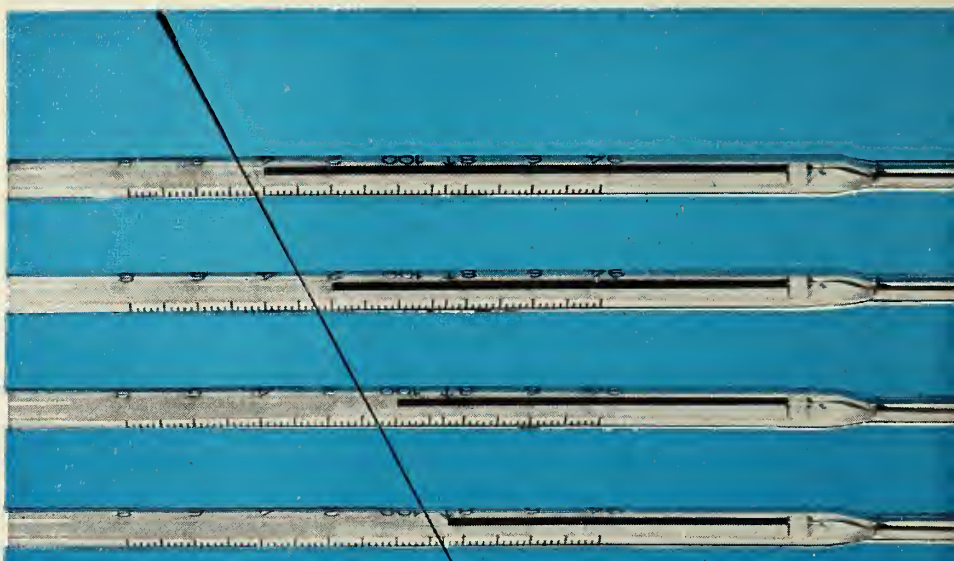
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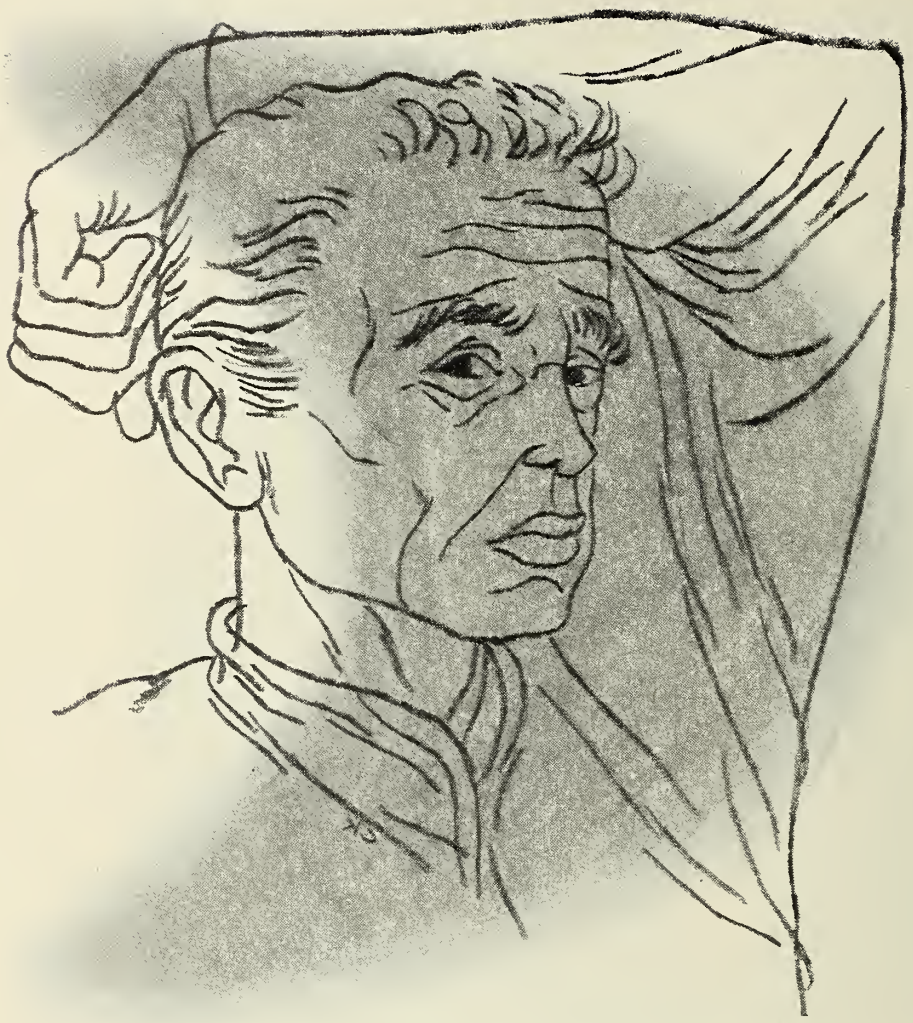
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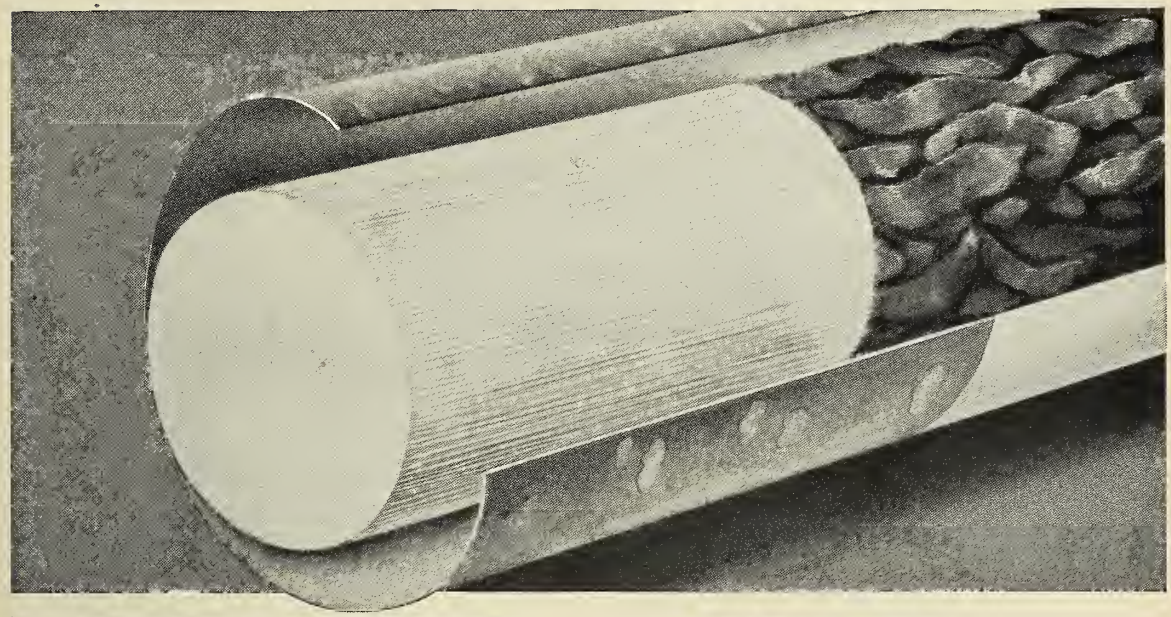
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Surgical Psychology

By John M. Dorsey, M.D.
Detroit, Michigan

THIS SHORT PRESENTATION shall have to by-pass most critical interests such as the demand for surgery to appease needs for punishment; the use of the surgical operation for "living out" castration, as well as pregnancy, phantasies; the meaning of removal of the offending part (including cerebral lobotomy) as repression in general and as magic "undoing" in particular; the deeply motivating significance of the physician as parent; the "phantom limb," et cetera. These new perceptions require of all of us physicians an extension of our surgical views. They lay the foundations for a healthier surgical living than could be enjoyed before by us. Neither can this report more than mention such important insights as that injury to erotogenic zones, including the face and especially the eyes, is most apt to be traumatic. Every anaesthetist with this insight is prepared for complications in controlling the depth of anaethesia for operations involving deeply personalized areas.

Perspective

As our great educator Horace Mann observed after hearing Emerson lecture, "How much more can be accomplished by taking a true view than by great intellectual energy." Few seem conscious that there is such a thing as hygienic morality, but he who lives with consciousness of this active medicinal principle lives most happily. However, as Amiel observed, "There is no curing a sick man who believes himself in health." There can be no help for man to the extent that he ignores the one and only health source of self-help and nestles into the lulling delusion that somebody else can take care of him. The whole value of medicine, as of all education to health, is self-help. The physician is of importance in the world in proportion to his reverence for the inviolable dignity of the human individual.

The popular notion of "acquiring" an education is tantamount to seeking second hand impressions of life while one's own life is flitting unnoticed away. Such education begets the growths of affectation, imitation, and irresponsibility. The mind needs to be developed, and, to that end, we should live it entirely as our own. The only way to secure wisdom, as all else, is by *being* it, by growing it. The physician has the most solid regard for facts and reality who schools himself heartily in this discovery of what his life is all about, namely, about his own being. This agricultural viewpoint transforms man's existence, sees the desert blossom as the rose. What is not vanity? Every man is the only specimen of a man he can ever observe, he is his only museum for his inspection. It is the rare man of strongest mind who observes his vast solitude, who sees why "alone" means literally "all one." Nothing that he lives (grows) *can* be indifferent to him. Insight, seeing all within with the awareness that it is within, that is true discernment, the worthiest exercise of devotion! All else is Babel and Bedlam,

Given before the second Annual Symposium on Trauma under the joint auspices of the Michigan Committee on Trauma of the American College of Surgeons and the College of Medicine of Wayne University, Nov. 18, 1953, at Detroit, Michigan. For helpful suggestions in the preparation of this talk, grateful acknowledgment is expressed to Dr. Charles G. Johnston, professor and chairman of the department of surgery, Wayne University College of Medicine.

without religious enlightenment of the view. Few of us realize the implications in the fact that our term "prestige" comes from the latin word for falsehood.

Not only the "ungrateful" patient is in need of helping himself, but also the "grateful" patient. There is but one healthy subject and object of gratitude ever, one's very own self. Certainly we hope and expect that *our* patient will grow the deepest kind of gratitude for his physician. Distinct appreciation of the health importance of observing the true location of helpfulness is of the greatest practical value. Self-trust and self-reliance are precious sources of self-esteem necessary for healthy growth.

Certainly we hope and expect our patient will find himself able to help himself by means of *his* physician in a uniquely healthful way, namely, with the deeply gratifying personal sense of thankfulness for his very own growing helpfulness. To cheat himself of the self-satisfaction attendant upon getting himself well is to lose out on one of the greatest thrills provided by living and dull the strongest incentive to live, namely, freedom. The patient has misery heaped upon his wretchedness through finding that his physician's or nurse's care is motivated by self-sacrifice rather than by self-devotion. He is relieved to discover that his physician and nurse are realizing that they are helping or hurting their own separate selves *only* in their professional living as in all of the rest of their living.*

The Surgical Character

Physicians grow to devote themselves to the development of the forces of character prayed for by Reinhold Niebuhr: "Give me the serenity to accept what cannot be changed, give me the courage to change what can be changed, and the wisdom to know one from the other."

The choice of studying and practicing one's self in surgery involves heroic willingness to identify with greatest suffering, and that by self-possessed living of it personally and hopefully, not by seeking vainly to have another man's life. Thus the surgeon requires himself, at the same time, to be under greatest stress and to be of good cheer. Whatever the extremity of the situation, and surgical work more than any other kind confronts extreme circumstances, he must take in the situation "head on" and with deep cheerfulness. Good natured courage is the patient's best antidote for his sickening heaviness and dread.

The most successful surgeon has a mind which is aware of itself. He genuinely feels with his patient most. He is not dispassionate, or coldly distant from his patient's agonizing condition. This kind of lifelessness has no place in the basic medical character. Enjoining love and skill, the strong-minded surgeon serves with the heart as well as with the hand and head. Although he is truly matter-of-fact and self-contained he is not insensitive and uncaring. His facts are comprehensive and his self-content includes the keenest sense of caring for his hard-favored fellowman. He may be compared properly with the helpful parent who is deeply concerned to act fittingly, and not paralyzed by alarm. He operates upon his patient as himself. (This surgical attitude will bear the fullest practical application). He recognizes distinctly that the traumatic force is demoralizing, that it shakes his patient's confidence in his own resources, and that it leaves his patient seeking frantically to insure reliable, dependable, encouraging and reassuring developments of strength within himself. Such is the true account of trauma's meaning for every patient and the physician who can endure every sober consideration of mind scattering shock, in terms of its life and death significance, grows greater healing power.

Pre-eminently, surgical care introduces the need for deeds besides, and not instead of, insights; but basically the surgeon must conduct himself with assurance. His occupational dilemma of coping with grave uncertainties with hopeful confidence is most trying of his own faith in the wonderful resourcefulness of human nature. The surgeon who has lived through the most of these endurance tests has thereby developed the healthiest surgical character. He has grown a greater trust in the resilience and resources of man than popular opinions allow. His patient rewards him with trust in his doctor's ability to "see him through" his crisis with appreciation of his doctor as his chief progressive force. The physician who "gives up" to his opposition, who

*The physician is fortunate who genially recognizes as unhealthy the home presided over by parents whose attitude is that they are continually making self-sacrifices for their child. The child of such a home suffers a painful kind of living, namely, the sad realization that his parents are doing what they are unable to do well for their child, that their attitude is not one of glad privilege for their opportunities to live more abundantly, but rather a "put out" one of loss on account of their child.

despairs of life, who cannot cling courageously to the most slender thread of life hopefully, needs most of all to help himself in this direction.

Although appearances might not seem that way, our patient has to co-operate with his physician. If his physician's predominant attitude is one of "I'm afraid it won't go well," rather than one of "I must do all that I can do to enable my patient to make himself well," the patient finds his expected source of greatest strength taking the side of illness.

Circumstances under which surgery is indicated often allow little opportunity for knowing what kind of person the patient is. This handicap is most serious. Hawthorne recorded keenest health insight, "A bodily disease which we look upon as whole and entire within itself, may, after all, be but a symptom of some ailment in the spiritual part." The evaluation of the man, especially of his personal reaction to surgical procedure or to injury, is an adjunct to safe surgical technique. The unavoidably common finding that his patient is a stranger is one of the most severe trials complicating the professional life of the surgeon, a handicap to be tolerated whenever it occurs, but never ignored. Force with which one patient is shocked may not be traumatic to another patient who might even use it to prolong his life.

Another point in surgical care which may not be overlooked "in the excitement" is that it makes no difference in the basic help needs of our patient if his life is threatened by the invasion of a pneumococcus or an automobile fender. In either case the medical indications are fundamentally the same. In other words, surgical care is medical care. The temptation to indulge the irresponsible attitude is ever strongest where calls upon responsibility are heaviest. "After all there isn't much I can do, he was hit by a train," is an attitude which is entirely beside the point. The surgeon is not responsible for the injuring agent but he holds himself responsible for the repair's being as favorable as possible. The medical perspective of investigating by every available means of anamnesis, clinic and laboratory every possible sign and symptom is critically indicated for every surgical patient.

The most efficacious psychological approach of the surgeon in any and every case is just like that of the physician attending any other sickness: each sign and symptom, however serious, is a precious indicator of the way into, and hence the way out of, trouble. As Thomas Fuller sagely observed, "Pains are the wages of ill pleasures." It is perfectly evident to anyone who can see it distinctly that every disadvantage man suffers is most wholesomely observed as a helpful indicator to him that he has placed himself under unfavorable circumstances and a helpful director to him as to how to extricate himself. Everything is quite as it should be. All one can think about, who is able to sense being in trouble, is how to get out of it. Furthermore, with the human constitution some other way all human life would shortly disappear. It would not take long for his life to end itself entirely if man were deprived of his sense of disadvantage. The same kind of suffering which results in hardihood meets with hard-heartedness as the sign that the limit of hardihood is being exceeded.

Mental Trauma

Most careful students of psychological medicine recognize our mental power above all as a device for enjoying living, as an apparatus for dealing successfully with forces which would otherwise obstruct living. The mind is constantly active in re-establishing stability after a disturbance. Biologists genenerally recognize a basic life tendency to maintain an energy quantity constancy and steadiness, against opposing tendencies. Cannon gave the term "homeostasis" to describe this balancing act of equilibrium. When the maintenance of mental equilibrium fails, the mind is thereby traumatized.[4] Too much mental tension within a given unit of living, is the definition of mental trauma. The expression "too much" here permits of specific definition: beyond the mind's capacity for insight, for appreciating that it is actively engaged rather than passively overwhelmed.

What is trauma, even for the same person on different occasions, varies greatly, depending upon such predisposing factors as fatigue, sickness, unpreparedness, and no outlet of any kind for discharging tension (for example, terror without other injury such as a wound). Previous mental weakening specifically in the direction of the patient's being unable to call his soul (mind) his own, most decisively favors trauma.

The mind tries to recover from the shock of trauma in characteristic ways which have been carefully described by medical psychologists.[3]

1.—Inhibition of various mental functions, especially of loving and of being loved, in order to concentrate all mental energy available to cope with already existing overwhelming excitement restricted largely to the area of injury. Thus, either fainting or partial blocking of perception is common. Cannon includes a beautiful description of this withdrawal by Fischer: "A patient is brought into the hospital with a compound comminuted fracture where the bleeding has been slight. As the litter is gently deposited on the floor he makes no effort to move or look about him. He lies staring at the surgeon with an expression of complete indifference as to his condition. There is no movement of the muscles of the face; the eyes, which are deeply sunken in their sockets, have a weird, uncanny look. . . Even respiratory movements seem for the time to be reduced to a minimum. Occasionally the patient may feebly throw about one of his limbs and give vent to a hoarse, weak groan. There is no insensibility, but he is strangely apathetic, and seems to realize but imperfectly the full meaning of the questions put to him. It is of no use to attempt an operation until appropriate remedies have brought about a reaction. The pulse, however, does not respond; it grows feebler, and finally disappears, and 'this momentary pause in the act of death' is soon followed by the grim reality. A post-mortem examination reveals no visible changes in the internal organs."[2] This is the picture of a patient who "has given up." Every surgeon will clearly realize that predominant withdrawal and resignation on his part cannot contribute to recovery.

2.—Spells of uncontrollable anxiety. Rage, and convulsions may occur as efforts to discharge tensions. Anxiety is the sign of dammed up tension, the characteristic pain of mental stretching. There is observable an inverse relationship of anxiety and symptom formation; thus if the expression of the symptom is blocked, anxiety again takes over.

3.—Insomnia and somnolence with recurring dreams of trauma and waking repetitions of phantasies of the traumatic event, all in the effort to attain an attitude of control over the overwhelming distress. We sense thus the patient's effort to help himself who insists upon "talking about his operation all of the time."

4.—Turning to introversion and regression as sources of solace, on account of the imbalance of mental equilibrium which favors phantasy and more primitive developments rather than insight developments.

Treatment is aimed at furthering possibilities for our patient who has "gone to pieces" to "take hold of himself," "get next to himself," "pull himself together," both by his resting or "quieting down," and by seeing him through his sometimes violent efforts to endure and discharge tension.

In every traumatic event the rôle of psychological medicine in all medical work is best highlighted. It is most enheartening to every physician striving for the cause of wholesome surgical psychology to find in the studied reports of an able and eminent surgeon such mind conscious utterances as "the psychology of transference," "an unfavorable balance in the pain-pleasure principle," and the "preponderance of a materialistic philosophy in surgery."[1]

In conclusion the way we are now treating our surgery patients, fine! It represents our present best. If we begin with proper frankness at that kind truth we are more willing and able to consider any change in our method for the better. Even if we faint or "throw up" at the sight of blood it is our then best and deserves that designation. Thus we do not depart from our habitual devotion to considering the presenting facts. Everyone's greatest need in life is to make himself do what he can. Perhaps Emerson described the surgeon best,

"The hero is not fed on sweets,
Daily his own heart he eats."

May we see health and sickness as they are, namely, absolutely evenly distributed throughout humanity, each one of us wearing the chains his brother wears as well as his wings, each one of us having his illness as well as his health.

May we deliver ourselves from the evils of "healthier-than-thou" shams and deceits, and even of the pharisee observe "There go I."

May we see clearly that all we can do is grow, that all we can grow is our individual selves, and that all of our self is godly.

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Inhalation Therapy

Treatment of Local Pathologies of the Upper Respiratory Passages

By A. Leenhouts, M.D.
Holland, Michigan

INHALATION THERAPY, that is, the use of the respiratory passages as an avenue for the introduction of remedial agents into the body, has not received the attention that it is entitled to, in the development of medical therapeutics. To prove that these passages afford ready access to the body for certain volatile substances, we need only to note the effect produced by the inhalation of the various anesthetics, the lethal gases, such as carbon monoxide, cyanogen fumes, and the members of the halogen group: iodine, chlorine and bromine. Any research applied to these agents, however, has in the past been directed to their toxicity and their dangers to the human body, rather than to any therapeutic properties they might possess.

While it is not the purpose of this paper to dilate upon the potential value and possibilities of inhalation therapy as an adjunct in treating systemic disorders, it may be stated in passing that certain observations, made while studying the local effects of medicated air upon the mucous membranes of the respiratory tract, proved that several of the drugs employed in the study can be utilized for their general action upon the body, some even to better advantage when administered by the respiratory route, than by the alimentary route. This is true of the halogen group, especially iodine and its volatile derivatives; even more true of ethyl nitrite, in its action upon blood pressure and heart action. It definitely lowers blood pressure and relieves heart tension.

From these observations, it would not be unreasonable to conclude that medical therapeutics has missed a real opportunity when it failed to make use of the respiratory tract, as an avenue for systemic therapy. The fact that volatile agents enter the blood stream directly without being exposed to the varied chemical reactions that occur in the digestive tract, should make their action more positive and certain. It is reasonable to suppose that the drugs administered orally are often altered by the chemistry of the stomach and the intestines before they are absorbed into the blood, making their physiological effects uncertain and variable.

These observations open up a fascinating field for study and clinical research. Our present interest, however, in inhalation therapy, is in that phase which deals with its application to the respiratory tract itself: i.e., direct medication of the air passages by inhalation.

Some desultory efforts in this direction have been made but aside from atomizing, vaporizing and steaming procedures and the common menthol inhalers, the only drugs that are used by way of inhalation for therapeutic purpose are amyl nitrite in angina and the ammonia salts in fainting, et cetera, both only emergency measures. Some few years ago, a spasmodic attempt was made to treat acute rhinitis and head infections with chlorine gas. Because of its crudeness and its ill-advised random application, it soon fell into disfavor and was thrown into the discard. The various medicaments applied by means of atomizers, vaporizers and steam apparatus, find a small place of usefulness in the physician's armamentarium and are still in common use by the laity, but in the main have proven unsatisfactory, largely because the spray or vapor, when introduced into the nares, is not carried beyond the vestibule and anterior turbinals, and in the throat it reaches the soft palate and possibly part of the tonsils and pharynx; for the rest, the passages and accessories remain untouched—steam inhalations are useful where humidity is required.

The field of inhalation therapy is therefore confined largely to the inspiration of medicated air; the air becomes the vehicle for the remedy and is carried wherever the air travels, which means to all the passages and accessories.

In its practical application, two requirements must be met. The remedies employed, to be available, must be volatile, and a device must be provided that shall be convenient and efficient. For the first requirement, the volatile remedies at our disposal belong to three groups, viz., the halogens: iodine, chlorine and bromine, and some of their derivatives: the ethyls, which in their combination furnish a large number of available products; and the volatile oils, of which there are a considerable number. For the second requirement, a simple,

portable device is available, the construction of which is such that its cost is nominal, can be carried in the purse or pocket, and yet meets the requirements.

Our present interest lies in the local effects of these products when applied to the respiratory tract. In this connection, a review of the functions of the lining membrane and the anatomy and the structures upon which these functions depend, will be useful.

The constituent elements of the mucous membranes are the epithelium and stroma, the mucous glands, the blood vessels, and the nerve terminals. The epithelium in the nares is provided with cilia, which under normal conditions keep the membranes free from accumulations, and these cilia fail only when a superfluous amount of secretion is present, or when they are weakened or paralyzed by toxic products or faulty enervation. These cilia play an important part in the normal functioning of the mucous membranes, and should receive serious consideration when treatment is applied to the nares. It is well that the present day trend in rhinology is away from the radical, destructive surgery in vogue in recent years.

The moisture normally present in the nares and throat is of two types, the one, a tenacious ropy secretion furnished by the mucous and goblet cells, embedded in the membranes; the other, a watery, serous exudate from the terminal blood supply of the membranes. The mucous secretion protects the lining of the respiratory tract, and is the first barrier of defense in the protection of the body against invasion by microbic and other deleterious substances. (It is an open question whether this protective influence is mechanical, biological or chemical; more likely a combined effect.) The serous exudate, being liquid, prevents the mucous and foreign material from adhering to the walls, enables the cilia to carry off the mucus, and at the same time humidifies the air as it passes over it. Changes in the supply of this fluid are readily induced by changes in the temperature and humidity of the atmosphere, by gases, irritating particles and dust in the air.

The abundant vascularity of the nasal mucous membrane is essential to its function of warming and humidifying the inspired air, as well as supplying nutrition, and it is this vascularity that so easily becomes the source of distress by obstructing the nasal passages, when its control is disturbed. This control is disturbed by agencies that stimulate and produce active engorgement as in inflammation; or that inhibit the vasco-motor mechanism and produce passive dilatation as in the so-called hyperaesthesias of the nares. These two forms of vascular disturbance, though similar in their effects, are very dissimilar in their nature. An acute infective rhinitis is a very different condition from a hyperaesthetic rhinitis. Hyperaemia is present in both, but in the one it is active, in the other passive, and this difference must be borne in mind in the treatment applied.

The third constituent element in the mucous membrane, the nerve supply, is the all-important factor in the control of the other two elements. It is this delicate, extremely complicated, automatic nerve mechanism that is responsible for the maintenance of a proper balance in the blood supply and secretions of the upper respiratory tract. Its functioning determines whether or not nature's first barrier of defense is prepared to ward off infections and protect it against irritants; microbic, gaseous, dust or pollens. It is through the nerve supply that these irritants, both external and internal, set up responses in the blood supply and secretions of the mucous lining. These responses are intended to be protective. The increased blood supply in an infection is nature's effort to combat that infection. But this increased blood supply leads to congestion and narrowing of the breathing passage, even to complete obstruction, thereby producing one of the prominent and annoying symptoms of a head cold.

Applying adrenalin or ephedrine gives temporary relief from the congestion, but is not remedial, and may even be harmful in checking nature's effort to combat the infection. Likewise, in the passive congestion in hyperaesthesia, the obstruction to breathing becomes an outstanding symptom for which the sufferer seeks relief. Adrenalin or ephedrine afford temporary relief, and probably are not directly harmful, although we know that their effect is only a temporary alleviation, and not at all curative. In both of these vascular congestions, there is an increased flow of serous exudate, hence the watery nose, and in both the mucous secretion is interfered with. In the acute stage of an active inflammation, it is inhibited, while in the passive type it becomes thin, escapes with the serous exudate, and fails to perform its function as a protective covering.

Bearing in mind the nerve control of both the blood supply and the glandular secretion, the importance of the proper functioning of the nerve supply becomes evident as a prime factor, both in preventing and subduing the pathologies of the lining of the respiratory tract. While in practice, we meet a variety of alterations in the tissues due to long-continued inflammation, traumatism, new growths, et cetera, which require special treatment, perhaps surgical removal, or replacements, or cauterization, yet the basic and ideal therapy should always aim at restoring the tissue to normal functioning; and the less damage and destruction the treatment involves, the better it is for the ultimate interest of the patient.

In the light of these fundamentals, a series of clinical studies were undertaken, with a view to determine the effects of certain groups of volatile agents upon the functions of the mucous membranes of the upper respiratory passages, with special reference to the secretions, the blood supply and the nerve responses, and then also determine their therapeutic value in the pathologies of these tissues.

The groups studied were the volatile oils, the ethyls and the halogens. A simply constructed inhalator was used to apply the drugs. This inhalator consists of a container which holds the medication, and an inhalation tip that is applied to the nose or mouth when used. The act of inhaling draws the air through the medication, and the medicated air is carried into the air passages. Either the mouth or nostrils are used, as the areas involved may indicate. The dosage is gauged both by the concentration of the medicament and the frequency and number of inhalations. Ethyl alcohol is used as a solvent or diluent where needed.

In the studies, normal as well as abnormal cases were used, and the reactions noted, as they affected the secretions and vascularity.

Of the volatile oils, a large percentage were inert, a small percentage were so definitely irritating that they caused inflammatory symptoms, while a few were more or less mildly stimulating. This latter group consisted of the oil of pine, origanum, cajeput, peppermint, et cetera, and when inhaled cause an increased redness, with some engorgement of the vessels and a moderate watery exudate, the effect lasting twenty or thirty minutes. When the strongly irritating oils were inhaled, it was followed by a violent reddening, severe engorgement, and profuse watery exudate, with a subsequent swelling of the membranes that might last for six or ten hours. Neither in the acute or chronic pathology did the volatile oils alone contribute to alleviate or subdue the disorder.

Of the ethyls, outside of the ethyls of the halogen group, not any were found to have any beneficial effect, either in the acute or chronic infection. Some of them produced active reactions in the vascularity, but these effects were so evanescent that a few minutes after the inhalation ceased, the membrane returned to its former condition.

Menthol, thymol and eucalypteol were carefully studied. Their action is very similar, only menthol is the more active. They all exert a detergent or astringent action on the blood vessels, giving the patient a temporary feeling of coolness, and freer breathing. Their effect passes off in fifteen to thirty minutes, and is followed by reactionary engorgement. If frequently repeated to the normal membrane, an irritation is set up much like the beginning of an ordinary head cold. Neither of them alone or combined with the oils, were of any permanent benefit to any of the pathologies, and in the hyperaesthesias, were found to be harmful rather than helpful.

Of the halogen group, which proved to be the most interesting and valuable, each of the three, iodine, bromine and chlorine, exercise a distinct influence on the functioning of the mucous membranes. While the oils, the spirits, and the menthol groups affect the vascular supply and consequently the serous exudate, they do not influence the mucous secretion, whereas the members of the halogen group do affect the mucous secretion, more especially iodine and its combinations. It was upon this latter group of agents that the studies were concentrated, especially as applied to pathological conditions.

The cases selected for treatment were classed as the acute inflammatory, the chronic inflammatory, and the hyperaesthetic. Records were kept of the cases that could be followed up. Of the acute inflammatory there were twenty-four; the chronic, thirty-two; the hyperasthetic including those caused by pollens, food allergies, and undetermined irritants, twenty-eight.

In all the cases, the general hygiene of the patient was looked after, such as rest, diet, and elimination, but no other medication was prescribed outside of inhalation. All these cases were

typical of their class, varying in severity, but in selecting the cases those with serious abnormalities, such as septal or turbinal obstruction, polyps, et cetera, were either first corrected or eliminated from the study. Minor abnormalities were ignored.

Of the various products studied, iodine and its combinations stood out as the most effective and promising. This led to the adoption of ethyl iodide as the basis for the formulae used. In the acute cases ethyl iodide alone proved helpful, inhibiting somewhat the copious watery discharge and shortening the course of the infection. By the addition to the ethyl iodide of an ammonium element in the form of ammonium iodide, a very marked improvement of this mode of treatment followed. In the cases where the treatment was started during the first twenty-four hours of the attack, its progress in every way was checked, and instead of running its full course of seven to fourteen days, the symptoms disappeared in two to four days, without the usual purulent discharge, and the frequent extension to the sinuses and bronchi. In the cases where the invasion had occurred two or three days before treatment was started, the course was definitely modified in the severity of the symptoms, as well as shortening the period of recovery. In only two of the twenty-four cases observed was there subsequent involvement of the sinuses, and any fever symptoms present promptly disappeared. In three cases, where the invasion started in the larynx or trachea, the results were similarly favorable. As a prophylactic for the "common colds," it appears to be useful, but in this field only a limited number of cases have been observed. (Personally, I have remained free from the customary winter colds since using the inhalator.)

In the chronic type, including the so-called chronic catarrh of the nares, sinuses and throat, with their attendant symptoms of abnormal discharges, head pains, stuffiness of the head, general fatigue, et cetera, it was found that eighteen of the thirty-two cases who persisted in the treatment, complete relief was obtained, and objectively, the lining membranes appeared normal. The length of time required for the treatment varied in the different cases; the shortest period was two months, the longest ten months. Of the remaining fourteen cases, eight were relieved to the extent that they discontinued treatment on their own account, and six received little or no benefit. The surprising feature of the treatment in this class of cases was its favorable influence upon the sinus involvement. The one serious problem in these chronic cases is to secure intelligent and continuous co-operation of the patient, and if the patient is not willing to persist for at least two months, it is better not to make the attempt.

Along with the local benefit secured, in many of the cases there was a marked improvement in the general health and vigor of the patient. This improvement can probably be ascribed to the iodine action on the thyroid, as well as to the subsidence of the chronic inflammation of the respiratory tract.

In the hyperaesthesias, it was found that the inhalation treatment was more satisfactory in the group that were caused by external irritants, such as dust, pollen and gases. However, a certain percentage of the internal type, such as food allergies, were favorably affected. The formula adopted in this class of cases was modified by the introduction of a bromide element. Of the twenty-eight cases studied, only ten were simple hyperaesthesia; the remainder were complicated by chronic infections. Reflex asthma was present in eight cases.

Objectively the inhalation treatment did three things: (1) It reduced the profuse watery discharge and induced a freer flow of the mucous secretion. (2) It reduced the engorgement of the membranes, resulting in freer breathing. (3) It reduced the reflex symptoms of prickling, sneezing, asthma, et cetera, indicating desensitization of the nerve termini. Subjectively, in 80 per cent of the cases treated, the benefits were so marked that complete relief was secured, while in the remainder, more or less improvement resulted.

In the matter of dosage and detailed mode of application, the following general rules were adopted: In the acute cases formula No. 1 is used every hour to two hours, six to eight inhalations at each sitting, during the first day; subsequently every three to four hours, as conditions indicate. The inhalations are taken by nostrils or mouth, being guided by the areas involved. In the chronic cases, Formula No. 2 is used, three or four times a day, ten to fifteen inhalations at each sitting, to be continued over a period of a month or more. In the hyperasthesia cases, Formula No. 3 is used, one-half to three hours apart depending on the stage and the severity of the attack. In the cases of pollen

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Multiple Sclerosis

By William L. Benedict, M.D.
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A TYPICAL EXAMPLE of clinical problems that are encountered in the management of a patient with multiple sclerosis is the case of a young woman newspaper reporter and staff writer in a southern city, whose course I have been able to follow fairly closely. For purposes of discussion the significant parts of her history may be recalled.

This patient was born and reared in a small town in one of the southern states. Aside from common childhood diseases she had been well. She was somewhat above average in weight and height, was active in social affairs, a better than average student, and from high school days was ambitious to become a writer. She was an only child of an ambitious and doting mother who largely influenced the daughter's decisions and more or less directed her scholastic and her emotional life.

At the age of twenty-seven the young woman was engaged in special newspaper reporting of a national political campaign when she suddenly lost the vision of her right eye. Consultation with physicians in her home town failed to establish a cause for the attack of blindness in the one eye. Accompanied by her mother, she entered a large clinic for thorough examination.

It was soon determined that there was no serious acute matter that needed emergency treatment, and preliminary physical and neurological examination established the fact of unilateral amblyopia of unknown cause.

Unilateral amblyopia is known to result from a number of causes. A lesion may be found in the eye or along the visual pathways anywhere from the optic nerve to the cerebellar cortex. The blindness may result from endotoxemia, tumor, aneurysm, drugs, chemicals, hereditary or acquired nervous degenerations and diseases, emotional stress and functional disorders. A comprehensive history was taken and followed by complete physical, neurological and psychiatric examinations. These investigations resulted in a diagnosis of retrobulbar neuritis of unknown cause, probably multiple sclerosis. The young woman was hospitalized for treatment, and within six weeks from the onset of her blindness vision was restored to 6/6 without glasses and the visual field was fully restored.

This patient was warned to rest for several weeks before resuming her work, advised, if possible, to take a vacation trip alone and to defer a proposed wedding.

The subsequent ten years of her life may be summed up briefly. She resumed her writing; she spent much of her time in a northern state. After a few years she married a tradesman, settled in a small town in a southern state, has had three children and two subsequent episodes of transient amblyopia in the same eye with complete recovery from one. No cause for her attacks of blindness has been fully established, but the presumptive diagnosis of multiple sclerosis still stands.

Some of the features in this case constitute the basis of the following discussion.

Discussion

As mentioned before, this patient was a young woman who was born and reared in a small town in a southern state. There the incidence of multiple sclerosis is statistically less than in northern sections of the country where colder climate prevails. A survey of mortality statistics in the United States, Great Britain and Europe reveals that deaths reported as due to multiple sclerosis have been common in northern Europe for some time and have steadily increased in Australia, Canada and the United States during recent years. Reported mortality from multiple sclerosis varies with the mean annual temperature of the reporting area; the colder the climate the higher the crude death rate for multiple sclerosis. In the United States multiple sclerosis seems to occur more in the region of the Great Lakes, while in Europe it prevails more in the northern parts than in Italy or about the Mediterranean Sea. From a number of clinics in different parts of this country reports of cases of multiple sclerosis, carefully documented, have been compared with reference to climate and environmental living conditions, and while signs of trends appear, there are many exceptions. Multiple sclerosis is neither regional nor seasonal, neither is it associated with epidemics of infectious disease, nor is it incited or aggravated by concomitant disease, trauma or chronic systemic disease.

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The patient was an only child of a devoted but overly anxious and ambitious mother who influenced her daughter's activities, both scholastic and social. There has been considerable interest manifested in some quarters in the emotional and mental life of an individual in its relation to the incidence and course of multiple sclerosis. "Most neurologists assume that emotional stress sometimes precipitates attacks of multiple sclerosis, or abets regression. New attacks and regressions are sometimes thought to occur in association with emotional distress." Other observers attribute personality changes and signs of emotional instability to other causes and can see only a coincidental relationship with multiple sclerosis. Probably the problem would not be actually solved unless new attacks were experimentally produced by giving specific emotional shocks to patients with known multiple sclerosis.

The clinical evidence of emotionally incited attacks of signs of multiple sclerosis is far from convincing, and yet there may be set up a chain of reactions, physiological and chemical, from psychic trauma some time previous to the attack that by some secondary influence make an attack more probable in a susceptible person. The inquiry into mental conditions of a patient is usually made after one or more episodes of blindness or other single indications of multiple sclerosis, and to try to build up a true history of mental instability and nervous temperament may result in mistakes. The mother's dominance in such a case as we are considering is disturbing in examination, history, treatment and future clinical observation. It was difficult to arrange an interview with the patient alone but it was only then that a significant conflict between mother and daughter was revealed. The daughter was engaged in reporting a national political campaign for a large news agency, a fact which pleased the mother greatly, but the daughter was also in love with a man whom the mother deeply disliked. In highstrung emotional persons such a conflict has been known to lead to signs of physical disability. In this case the blindness of one eye may have been functional, hysterical blindness—although the more common finding is bilateral amblyopia. However, such a diagnosis had to be considered.

An associated thought in this connection was the effect of marriage and child bearing on a patient with multiple sclerosis. Should she be warned of the probable aggravation of the course of the disease and detriment to her health such as has been observed in some cases? It is not certain that pregnancy aggravates the course of multiple sclerosis. There are too many other possibilities present, but one well-known neurologist summed up the evidence in this way, "If I were sure that patients had multiple sclerosis, I would try to prevent them from getting married. If I were sure that married persons had multiple sclerosis, I would say that they ought to try not to become pregnant." According to one author, "Pregnancy is followed by an exacerbation in about 40 per cent of cases in women suffering from multiple sclerosis and should be avoided by them except in unusual circumstances and until other methods of control are better understood. A permanent change of climate is advised for those who can manage it."

The symptom which was this patient's only complaint was loss of vision in one eye. It was known that before the presenting episode of amblyopia this patient's vision was normal in both eyes. From the beginning of blurred vision, complete blindness of the one eye occurred within thirty-six hours. The obvious cause was retrobulbar neuritis, as the ophthalmoscopic examination was negative. What is the relation between multiple sclerosis and retrobulbar neuritis?

From a number of widely separated clinics in the United States, reports of series of cases of multiple sclerosis give the relative number of cases that suffered one or more attacks of retrobulbar neuritis. The differences are not significant, but it is important to note the significance of retrobulbar neuritis as an early symptom and sometimes the only symptom of multiple sclerosis. In 1942, in a paper read before the Section on Ophthalmology of the New York Academy of Medicine, I stated that at the time of the first episode of blindness it was possible in many cases to make a diagnosis of other causes of retrobulbar neuritis, such as arteriosclerosis, diabetes, brain tumor, encephalitis, arachnoiditis and neuritis arising from exogenous toxemia. In some cases of obscure causation a tentative diagnosis was made of one or another of these probable etiological factors on the basis of the history or the clinical findings, for example, alcohol-tobacco amblyopia, just as in other cases multiple sclerosis was suspected because of the history and of the ocular and general symptoms.

The records of more than 400 patients suffering from retrobulbar neuritis, seen at the Mayo Clinic from 1920 to 1940, were reviewed with the intention of determining whether patients for whom a tentative diagnosis of multiple sclerosis had been made had later experienced further evidence of the disease. In the series of 400 patients, multiple sclerosis was suspected in ninety by elimination of other factors which might cause blindness. In forty-one of these ninety cases, further evidences of the disease had appeared. In not a single case in which further symptoms of multiple sclerosis had not yet appeared were the retrobulbar neuritis and the scotoma found to be due to another cause. Multiple sclerosis occurs in both males and females at the ratio of two to three, at ages from sixteen to forty-five. Females are more often affected in the second decade, while the incidenc in males is greater in the third and fourth decades. Remissions are experienced in more than 80 per cent of all cases, although the periods between episodes of blindness and other signs of multiple sclerosis vary from a few months to twenty years. As remissions of six years are average, undoubtedly some patients succumb to some other cause. Acute retrobulbar neuritis appearing as the first symptom of multiple sclerosis was thought to be a sign of favorable prognosis because of its almost exclusive occurrence among ambulatory patients.

The early symptoms of multiple sclerosis are transitory muscular and sensory change that affect the eyes and extremities, nystagmus with or without diplopia, transient weakness of ocular muscles, especially the abducens, and central scotomata, usually of one eye but occasionally bilateral. In 15 per cent of 500 cases of definitely proved multiple sclerosis observed at the Mayo Clinic before 1933, disturbance of vision was given as the first episode of the disease. In an additional 40 per cent disturbance of vision occurred sometime during the course of the disease.

The retrobulbar neuritis of multiple sclerosis occurs without warning and unassociated with any other symptom. The onset of blindness is rather rapid. It usually proceeds as a gradual blurring or dimness of vision with development of an expanding central scotoma rather than the symmetric contraction of the field or the development of sector scotoma. The process may be arrested short of complete blindness. In most instances vision will begin to improve within three or four days, and will be completely restored within two weeks. If only partially restored within that time, recovery of vision may not be complete and a permanent relative scotoma persist. Recurrent episodes of blindness may be the only symptom and consequently many neurologists question the diagnosis of multiple sclerosis. However, it is agreed among ophthalmologists that recovery of vision from successive attacks of retrobulbar neuritis in multiple sclerosis is the rule, and that recovery of vision lost from retrobulbar neuritis due to any other cause is very rare, especially when due to trauma, drugs or neoplasms.

Clinical Aspects of Multiple Sclerosis

Multiple sclerosis is a disease that affects the nervous system primarily with secondary effects on the muscular system, and in some ways is associated with characteristic changes in the vascular system. One feature of the disease, the demyelinating of nerve fibers, places multiple sclerosis in the category of encephalomyelopathy which includes a variety of acute and chronic progressive neurological degenerative diseases that are due to a variety of causes, some of them obscure or unknown. These diseases have in common certain pathologic changes and clinical manifestations that are variable in extent and severity. In a classic case of multiple sclerosis, one will find clinical evidences in association with each other and in chronological succession in the first three decades in females, and less frequently in the third and fourth decades in males. This incidence is so uniformly true that it is chiefly in these age groups that the most serious problems of diagnosis are encountered.

Like some other diseases that attack the nervous system primarily, multiple sclerosis appears in some instances as a mild episode of disturbed physiologic function, such as transient weakness of a muscle or of a group of mucles, or a sensory disturbance, such as slight blurring of vision, difficulty in swallowing or talking, a pain in the eye or in a limb. Such episodes may be single and without remissions, at widely separated intervals or with frequent repetition, usually with increasing severity and greater sequelae.

The conservative neurologist reserves the diagnosis of multiple sclerosis to cases with multiple symptoms. The clinical nature of the disease is characteristic when a full complement of symptoms such as nystagmus, scanning speech and intention tremor are present. This is the original triad of Charcot. However, there are many authenticated

cases of multiple sclerosis that exhibit none of these symptoms in the initial stages, and they may be absent during the entire course. At the onset many of the symptoms of multiple sclerosis are so slight and transitory as to be disregarded by the patient and subsequently forgotten. These symptoms may return after a complete remission of months or years and gradually build up residuals that develop into the clinical picture of the disease.

There are a number of symptoms of multiple sclerosis that are also found due to other causes. The group of demyelinating diseases, of which multiple sclerosis is probably the most common in the twenty to forty age group, is characterized by symptoms that are common to a number of them, such as brain tumor, cerebral sclerosis, Schilder's disease, disseminated encephalomyelitis, encephalitis lethargica. Muscle weakness and paralysis are common in all of them. A single episode of a symptom characteristic of multiple sclerosis, even though one of the most common such as transient amblyopia, may be caused by another disease the second time it appears, as the existence of two or more diseases with common symptoms has frequently been noted. Repeated physical and neurologic examinations are necessary. In the absence of symptoms and signs of other diseases, multiple sclerosis has been the presumptive diagnosis in cases of retrobulbar neuritis, nystagmus and ocular muscle weakness in a number of cases when no other plausible cause could be considered. The clinical experience of ophthalmologists who have diagnosed multiple sclerosis on single episodes of retrobulbar neuritis justifies their action, although highly criticized by neurologists, for other causes of retrobulbar neuritis, toxins, trauma, neoplasms and functional diseases are practically always discovered by clinical examinations.

Multiple sclerosis is a pathological process in which the white matter of the nervous system is so changed as to interfere with nerve function. As against diffuse sclerosis, the lesions in multiple sclerosis are small, scattered and vary greatly in severity. It is generally conceded that the initial lesion is inflammatory. Whether the inflammation is due to virus, endotoxin, allergy, vascular disorders or functional disturbance is still a matter of investigation.

Of the possible etiologic factors that have been seriously considered, the vascular and allergic theories have been most recently advocated. "A bacterium is not the cause, but its endotoxin bacterial effect upon the enzyme and reticulo-endothelial system cannot be excluded today." "The virus etiology is extremely unlikely but it cannot be rejected dogmatically." Experimentally produced lesions are not characteristic of multiple sclerosis, although many of the clinical symptoms of the disease have been produced. In experimental studies with endogenous toxins, Wilson's disease, hepato-lenticular degeneration, uremia, eclampsia have extensive brain damage with plaques. More frequently than otherwise, the disseminated plaques were not related to blood vessel distribution.

The venular thrombosis theory has been advocated by Putnam and others on the basis of pathological changes, but it is discounted by those who cannot verify the findings. Foci of demyelination suggest degeneration through anoxemia in nerve tissue which has been deprived of circulation through venule closure, but the isolated areas affected, the frequent and characteristic recovery and recurrence throw doubt on the validity of the theory; and pathologic study of plaques of multiple sclerosis fails to support the theory on anatomical grounds. The venous sheathing found in the brain and in the retina is suggestive of vascular disease, and the evanescent character of the retinal venous sheathing is in keeping with the remission of symptoms but fails to explain symptoms that occur in the absence of sheathing.

Remote effects of endotoxins on the vascular system afford a wide field for speculation. Whether such toxins result from physiologic function, from bacterial or virus reaction, or from allergy, no one knows. The argument for allergy is attractive if we broaden the theory to include secondary and consequential effects. Angioneurotic edema, migraine, vaccine or serum reactions, food and drug idiosyncrasies and their neurological symptoms and signs have been accepted as allergic phenomena. It is often impossible to obtain a history of allergy in cases of multiple sclerosis, and without a clearcut history, diagnosis of allergy is purely presumptive. Yet, one prominent neurologist declares that "far more cases of allergic retrobulbar neuritis take place than occur as an early sign of multiple sclerosis." The question resolves itself into a matter of allowances; can the diagnosis of allergy be sustained on a single symptom and the diagnosis of multiple sclerosis denied?

A probable explanation for the attitude taken by the neurologist is his desire to avoid use of the

term *multiple sclerosis* because of the psychological implications of progressive disability and incurability, whereas allergy carries no such serious connotations. Nevertheless, there are not sufficient clinical signs of allergy in cases of multiple sclerosis to make the theory attractive to the average clinician. Furthermore, the clinical symptoms in humans are not reproducable, and remissions and exacerbations cannot be reproduced by any means at hand.

The etiology of multiple sclerosis is still unknown. Pathological changes are limited to the white matter of the nervous system. Diagnosis of early cases with only one or two symptoms is admittedly presumptive. But since there is no specific treatment for the disease and no surgical procedures are advocated, the diagnosis of multiple sclerosis on the records of the clinician is justified. Whether he wishes to avoid mental distress by withholding the diagnosis from the patient, is a matter of expediency that must be decided on the merits of the case.

Only a few years ago, disease of the nasal accessory sinuses was held by a group of outstanding oculists to be of such importance in retrobulbar neuritis that, regardless of negative rhinoscopic data and interpretation of roentgenograms, they directed the opening of paranasal sinuses by the rhinologist and assumed all responsibility for the procedure in the mistaken notion that ventilation and drainage of an apparently normal sinus was adequate to restore vision. Happily, that theory has been exploded and the practice has practically been eliminated.

Retrobulbar neuritis in a young person is frequently an isolated symptom. An ophthalmologist in such a case will, of course, think of multiple sclerosis as a cause, but will withhold diagnosis pending the complete physical and neurological findings. In reported series of cases of multiple sclerosis, retrobulbar neuritis occurs as a first symptom in about 15 per cent, and occurs some time in the course of the disease in about 40 per cent. It is not too much to assume that about one fourth of the cases of retrobulbar neuritis are caused by multiple sclerosis.

The ocular symptoms and signs of multiple sclerosis are usually early. They are present some time in the course of the disease in about 90 per cent of cases. Disturbances in eye movements are frequent. Incomplete ocular palsies, impairment of conjugate gaze, lid closure, dissociated eye and head movements and nystagmus are types of disorders noted in this disease. Besides the optic nerve, which frequently is affected alone, there is involvement of the median longitudinal fasciculus. Most neurologists are under the impression that this bundle serves the most important functional connection between the eyes and the rest of the body. Dissociated ocular movements without diplopia are common and often transitory. Variation in ocular muscle weakness is the rule. Complete third nerve palsy is rare, but sixth nerve supranuclear paralysis is common. Argyll Robertson pupil is seen rarely, but authentic cases are reported. The ocular signs are most helpful in establishing the diagnosis of multiple sclerosis but, of course, not always necessary. It should be borne in mind that as retrobulbar neuritis may not lead to blindness, even after several attacks in the same eye, so transient episodes of lid closure, nystagmus and ocular muscle weakness may also be looked upon as early signs of multiple sclerosis, so the total of ocular symptoms in the disease is quite high. The ophthalmologist is quick to observe these transient symptoms and to make note of them for future consideration.

Treatment of multiple sclerosis as a systemic disease is regarded by most neurologists as hopeless. No more certainty exists in regard to treatment than to etiology. However, symptomatic treatment of retrobulbar neuritis seems to be justified. There are a number of recorded cases of spontaneous recovery of vision without any form of treatment, but there are others that were immediately improved by fever therapy after partial recovery. Usually recovery of vision within two or three weeks is looked upon as the natural course. Recovery of further vision after an arrest of several weeks can be accomplished in some cases and results justify the treatment. The patient whose case history was referred to at the beginning of this paper has suffered three episodes of blindness and with fever therapy made a complete recovery from the first two. Since the third attack the vision has remained blurred. No other signs or symptoms of multiple sclerosis have appeared, nor has any other cause of the blindness been found. Here is a typical case that confronts the ophthalmologist contrary to all rules of the disease, yet most probably multiple sclerosis.

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The Necessity of Illness

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"All disputes of antiquity and modern times, up to the most recent time, are caused by the division of that which in its nature God has produced as one whole."—GOETHE.

IT IS a delight to be asked to address this group of medical general practitioners. I feel very closely identified with you because of a peculiar scientific curiosity to examine the nature of things and a deep need to be of service. We share the fantasy that we can rescue the suffering and this is our constant dream of glory. It is a strong motive force in our lives but we must use it wisely, for in our rescue we might expose our suffering patient to greater peril.

The general practitioner might be most comfortable if he would allow himself to practice generally and not make a specialty of general practice. As one specializes more and more, one adds blinders, narrowing one's observational field and, like the horse, protects oneself from the threatening events which lie outside. You are now rare in the practice of medicine for you share the environment of your patient's family living. Your presence in his house gives you an appreciation of his world far greater than any technical apparatus could. Specialist training colors our visual field to the color of the lenses of our training. It is hard to make discoveries because we cannot let in all the light.

I have had an unusual opportunity the past four years in the large teaching hospitals in Detroit to identify myself with each of the practicing medical specialties. This experience has tempered greatly the urge: to cure, to change, to take away, to cut out, to medicate symptoms. It has also made me ponder quite deeply: the meaning of illness. I have observed that clinical medicine is organ-system oriented, or technically-mechanically oriented. Medical procedure, referrals and consultations, are directed most specifically toward an exploration of organ systems. Its unstated hypothesis is that each illnesss has a specific cause and that the systems are independent. A search is made in the procedure for the malfunction of that organ system, according to the manner of laboratory science. Hospital construction and administration are oriented to this trend. I have sensed a great need, but also a hesitancy, for some exploration and appreciation of human-being (as opposed to organ function). We should not hesitate to explore the meaning of this hesitancy.

The challenge of biology is to attempt to develop theories that will include and render understandable all observed phenomena. The unity of life must find its reflection in a unity of the biological sciences. I have tried to accept this challenge in the development of this paper. What follows, therefore, I hope you will respect as that of an explorer in a new ocean, who is trying to chart for himself some landmarks that help him in his orientation.

The general practitioner shares more of his patient's autobiographical events, of his family living problems, of his environmental culture, than his specialist colleague. In this sharing, he has learned to develop a great respect for the symptom. I have seen this begin in the young medical student who pauses in his clinical work and spontaneously asks the question: "What is the organ saying?" Imagine, gentlemen, that a symptom could be a communication! But, for him to explore further this observation, he must conquer a certain fear. The philosopher Bergson noted this hesitancy years ago. He said: "The human mind feels at home when it is among inert objects, especially those solid objects which can support us and provide us with tools for work."

Let us look for a moment at the case records in our file cabinet. We find among others a patient who has been familiar to us over a long period of time. We learned a great deal about him while taking care of him during an illness when he was in the fourth grade at school. We got him through this illness fairly well. We noted that he was a shy child, afraid to venture forth and always more comfortable when he was invited to be the member of some group or gang. We had a variety of calls to see him in the next fifteen or twenty years and our file card indicates a variety of complaints. We noted that he had had bad head colds and asthma-like attacks when he was a youngster, and we referred him to an eye, ear, nose and throat specialist

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who helped him fairly well by removing his tonsils. Later, in his adolescence, he had difficulty getting a job and we had to see him for a variety of physical complaints: lassitude, poor appetite, some cardiac distress. Following this, he had a recurrence of colds and sinusitis with asthma-like difficulties, and we were again called to see him. We lectured him a little bit, cajoled him a little and referred him to a variety of colleagues who doctored him. He developed a rather persistent abdominal pain in his middle twenties and our surgical consultant decided that it might be best to have a look, and removed his appendix. We did not see him again for five or six years and we thought we had found the seat of his trouble. He returned, then, with a rather severe weeping dermatitis of the legs. Our symptomatic treatment was rather ineffective and so we referred him to a colleague in dermatology who cleared up the dermatitis rather well and sent him back to work. He missed twenty or thirty work days on and off during the winter and we stopped in for a few house calls. Later that spring, he developed a rather severe depression with feelings of worthlessness and threatened seriously that there was no use in living. We referred him to a psychiatrist who gave him some out-patient shock treatments and he returned to work in about a month. Later that year, we were called to see him because of a rather strange virus infection of the lung.

There is no need to go on, gentlemen; I am sure you have seen this variety of symptom hundreds of times, and so have I, so have all of our specialists colleagues. You have pondered over it and wondered about it. You have asked yourself the question many times, "What is going on here, anyhow?" But you were soon engrossed in your next case and found little time for reflection. Possibly we might do it now.

Illness is a natural event as is a thunderstorm which flattens our garden. In Darwin's world, it was the selector for survival. We recognize illness as a modification of a natural process. But is it always bad?

Inherent in the traditional connotation of the meaning of disease is the idea that one is attacked, possessed, afflicted or overpowered by outside, alien forces such as bacteria, and that an organ system is actively deranged. All of the biological sciences and their clinical ancillary, medicine, shared this tradition for generations. We need only observe that the formulators of our medical official nomenclature of disease arbitrarily decided to adhere to this traditional connotation for the purpose of categorizing illnesses logically. They are arranged, as you well know, according to etiology (the alien force) and topography (the actively deranged anatomical system).[19] The alien force was sought after by men such as Vesalius and Harvey. The growth of pathological demonstration seemed to verify the effort. Humanity prospered and gained. The history of the conquest of these alien forces and the exploration of the organ systems is so rich that a sample in any one area would do injustice to the whole.[7] (It is an outstanding event in my mind that I was given a ticket of admission and stood in line at the Johns Hopkins University for one hour in 1941 to see a single case of typhoid fever, on the wards where Osler had worked with thousands.) This conquest we must never take for granted, for these alien forces do stand outside us waiting to be invited in by a lack of health in ourselves or simply by overwhelming us. We see this all the time around the world in the outbreaks of various kinds of epidemics of infectious diseases.

As patients pass before us in our daily practice and we observe the pageant of illness more closely, we become aware that the clinical practice of medicine has changed in the past twenty-five years. Not so many of these diseases are related to the action of alien, or pathogenic agencies, on an otherwise normal organism. Illnesses now seem to arise from within the very nature of the organism itself and seem to represent some struggle in self-expression or some anomaly of our given biological substratum. The question to consider is not so much the truth of the observation, but why is it so difficult for us to accept it as a discovery? Possibly because we are comfortable in our tradition. A tradition is like a cloister, protective and comfortable. We inherit this tradition from such men as Virchow who taught that there are no general diseases, only diseases of organs themselves; or Pasteur, who had us believe that each disease has a specific cause. It is an historical paradox that the great accomplishments of the past often become an obstacle to further development. There is always an inertia between the discovery of a new scientific truth and its acceptance into scientific work. As human scientists, we categorize our observations according to the scientific philosophy to which we were exposed in our training. We need constantly to revise this trend. Our observations are our greatest teachers.[4,8,16,17]

Consider for a moment the problem of health. The connotation of this word includes: totality, entirety, sound, not broken, unity. We are reminded in Matthew: "He, who is whole, needs not a physician." The idea of wholeness, of oneness, of unity, is a rather recent concept in scientific medicine and I fear is making its way very slowly into clinical practice. It was not possible for clinical medicine to accept the biological unity of the organism until scientific laboratory exploration was able to demonstrate an unifying agency. The groundwork of this discovery came about with the understanding of the special characteristics of the neuron and of its extension into the central nervous system. A concept of co-ordination between the various parts of the system was possible only after Sherrington, the great British neurophysiologist, postulated in 1903 his theory of the integrative function of the central nervous system. This was a reflex theory and understood the organism as a bundle of isolated mechanisms which are constant in structure and which respond in a constant way to events in the environment. The cerebral cortex was seen as the organ of, and for, the adaptation of nervous reaction. The brain was the organ which received, correlated, stored and generated signals. We visualize here a system of control in which the forward part of the organism obtains information (through the sense organs) and feeds it back internally for guidance of its operative nerve center. (This principle of steersmanship finds itself expressed today in the science of cybernetics.) We entered a new phase of understanding in which the organism had the possibility of adapting itself to external stress. Great stimulus to this research was given by Claude Bernard who noted that the constancy of the internal milieu is the condition of the free life: the constancy of temperature control, hydrogen-iron concentration, water balance, oxygen, calcium, et cetera. Walter Cannon explored further the inherent wisdom of the body. This was the theory of homeostasis.

Let me summarize the past fifty years of important research in the biological sciences by indicating: that in a stimulus effect, we are not dealing with the performance which is caused by that stimulus alone. Simultaneously occurring processes present too great a deviation from the mean. The resultant performance is part of a total process which regulates the course of excitation so that it seldom deviates greatly from a mean. This, of course, is a physiological theory of adaptation. New developments in the understanding of the physiology of the hormonal systems and their relationships to nervous integration has greatly increased the scope of the understanding of the adaptive principle. Hans Selye, the great Canadian physiologist, has spent thirty years attempting to order these observations. In his little book, "The Story of the Adaptation Syndrome," he states:

> "Indeed, even apart from endocrinology, the principal endeavor of medicine in general is beginning to change. It is no longer the search for specific pathogens and for specific remedies with which to eradicate them. We always used to accept as self-evident the fact that each well-characterized individual disease must have its own specific cause. This tenet is self-evident no longer. It becomes increasingly more manifest that an agent does or does not produce disease, depending upon a variety of conditions, some of which have now definitely been identified as being determined by the adaptive hormones. There begins to emerge a new and somewhat more complex pathology in which the main objects of our study are no longer individual pathogens but rather pathogenic situations."

Medicine had now scientific theories to explain the relatedness of the various parts of the organism. Organism itself was considered a biological unity. The biological responses to the old physical laws of constancy were now known. On the physiological level, man could adapt himself to varying stresses and maintain the constancy of his internal milieu. The cerebral cortex was the highest level of adaptation.[3,12,18]

It was apparent to the clinicians dealing with people that the problem of adaptation was more complicated than this. To the clinician, adaptation was primarily a relationship, a reciprocal relationship, between the human being and his environment. Furthermore, there were qualities of the human that were beyond those of organism—more transcendental qualities. It was true, animals did adapt. They did fit. They did accept the life they were dealt. In every situation the organism was adapted to an expected environment. When it changed, the organism must adapt or perish. The human being had a greater potential than this. He could create a new environment, as he did music or poetry. He could change his preferred behavior by learning. We are reminded in the history of our own country that adaptation was often pure conformity. Our spirit, our nature was not expressed. The adventurer, the explorer, the pioneer, the man of the frontier are extreme but good examples of men maladjusted to their home-

land, unwilling to adapt, who went out to find or create a new environment to which they could adapt. The health significance of this struggle we must consider later.

Will you reflect for a moment on those qualities, human, which differentiate us from animals? The human being is: (1) able to discern between self and non-self; (2) to go beyond himself, such as in matters of service, love, compassion; (3) to experiment and test reality by delaying action and thinking and working toward a more distant goal. These qualities are in a sense spiritual qualities, but they are also mental qualities.[13,15]

The medical clinician was not able to go further with the exploration of adaptation without a valid science of the mind. In our search for this science we find that one of the most important historical scientific events was the publication in 1903 of Freud's book on the "Interpretation of Dreams," about the same time as the work of Sherrington and Claude Bernard whom we have already considered. Here for the first time a scientific procedure was used in order to deal with man's mental material as meaningful. The method used was psychoanalysis and a link was forged, by its theoretical postulations, between psychology and biology. The link was called the instinct theory. Following these discoveries, the mind may now be considered the highest level for adaptation in man, for it is primarily concerned with his coming to terms with his environment. He adds meaning to the experience: stress becomes particular and personal—almost intimate. Among those functions of the mind so important for consideration are: (1) the organization and control of motility and perception of the outer world and ourselves; (2) the testing of reality; (3) action and thinking. It must be appreciated with these discoveries that there were now available to clinicians three levels of observation of human expression: (1) consciousness, which includes voluntary thoughts and feelings and ideas; (2) certain inner states such as emotional attitudes and their physiological concomita; (3) the somatic processes, themselves. The philosophical postulate, consciousness, now became medically useful. Through it one could palpate thoughts, feelings, ideas and meanings. It was the human clinical agency through which we deduced relatedness in all of the spheres of human striving.[10,11,14,20] Thus scientifically, for the first time in the history of medicine (indeed of mankind), we stand on the threshold of being able to postulate a unitary theory of the science of man. Furthermore, we have the possibility that we may observe the relationship between the demands of the individual, the environmental necessity, the adaptation process, the preformed tools of adaptation, and their physiological equivalents.

We might summarize very generally for our purposes a great deal of research by saying that: the human being at any moment is a resultant of its interaction with its environmental milieu. Its existence and normal performance are dependent on the condition that a state of adaptation come about between its structure and the expected environmental events. We find the constancy principle operating in that the organism tries to preserve a state of harmony within itself, even if this harmony means illness. Another principle of biology is operative also, namely, that each new situation is handled as the organism had learned to handle it or a similar one before (the theory of repetition compulsion or the law of least effort). It is well to recognize that at any one moment we represent the particular manifestation of our own phylogeny and ontogeny. Each of us is individualistic! Our natures are our own—no other! Our adequate performance, or our failure, is a feature of our total behavioral pattern. If our response is ordered, we appear to be constant, correct, adequate to our individuality as well as to the respective circumstances. The total adaptive behavior pattern participates in a fashion appropriate to the demands in a total harmonious way. The mental, somatic and physical-chemical systems are in harmony, and we experience the mental feeling of well-being. If, for some reason, we respond inadequately because of the nature of the task, or our individuality, we experience disorder. Often this is characterized on the mental level by anxiety; physiologically and biochemically there is a disturbance on the somatic level, and the feeling of being unfree, buffeted and vacillating pervades. So involved are we in seeking to regain harmony according to the constancy principle that we are unable to face further demands placed upon us by the environment —we are ill. The first symptoms are the signs of struggle. Their character is dependent upon the patient's medical character which is formed out of his living use of his organ systems. (Consider the therapeutic procedure then, on the one hand which gives a Sippy diet for hyperacidity and pays attention to the patient; and on the other hand that which alters his individuality by taking out a piece

of his vagus, or stomach. We do not ask if something is cured, but ask the nature of cure.)

Much work and speculation is going on concerning the problem of one's medical character. This work attempts to correlate the adaptive agencies of the mind with the constitutionally given somatic system. We have experienced in the past fifteen years the growth of a new specialty called psychosomatic medicine. In that this has turned attention to the correlations, it is good. We need to accept the mind in medicine just as we need concepts of synthesis to explain health. There is a danger that this specialty because of its attention to the influence of emotions *on* the body, will split again our unitary concepts. Furthermore, in the search to discover the complexity of medical character, broad generalizations have been made. These generalizations are anti-individualistic and tend once again to rob us of the opportunity to make discoveries and to be of service. They lead toward categorization and manipulation of our patients. Note, for example, the expression: "He is the ulcer type" or "Asthma is the repressed cry for the mother." Such bits of knowledge tend to be used by the general medical profession in an empirical way, much the same as we take the detail man's word about the use of a new medicinal agent.[1] (To categorize often means to deny. To manipulate often means to avoid. Neither of these attributes is of therapeutic medicinal value.)

We have learned in all of the psychological research that the physician, himself, can no longer be taken for granted and that he is a most important medicinal agent and that all of the above applies to him as well as to his patients.[2,5,6] We must recognize the truth that in all of our clinical experience there is but a tangential meeting of two complex human worlds. To say that we know our patients is false. To say that we are observing them is probably more correct.

If you have followed me, with consent, this far, you will allow that the human being can exist in a state of harmony only if he finds an adequate environment in which to express his nature, or modify the environment, or his nature. In this process, the protest of the organ systems and behavioral manifestations is not a failure of that system *per se,* but a sign of total behavioral discomfort, for the human is at all times an organism, a mind and a member of society. He is constantly involved in three processes of organization: his body is exposed to stress, his mind to anxiety, and as a member of society he is susceptible to the panic and tension emanating from his group. Somatic tension, mental anxiety and group stress are different ways in which the human feels discomfort.[9] It is our problem to understand how the combined circumstances threaten the organizational ability of the human being. Health cannot be explained without synthesis. Synthesis and its final goal, integrity, indicate not only the achievement of order but the potentiality of growth. Not only a combining together, to form a whole, and a unity out of parts and elements, the end of integration is individual perfection—true health.

Physicians and patients constantly explain that they are never the same after an illness. The plea: "I want to be myself again" is a plea to return to the use of former constants of preferred behavior. This is possible, it often gives the illusion of great comfort, but it is not necessarily healthy. In the struggle of living, one develops here and there new constants of behavior and often these are reflected in new human measurements: such as changes in glucose tolerance curve, basic metabolic rate, blood pressure, heart rate, personality characteristics, new social behavior, et cetera. The pattern of expression is individualistic. We have the alternative in illness to rise beyond the struggle to greater health or regress beneath it to a former mode of adaptation. (Such is the patient who was cured of tuberculosis, developed severe depression and ended his life in suicide.) The symptom or illness disappears only when it is no longer of use to the human being.

The possibility of integration (as a step beyond adaptation) would demand a human integrating function; for to modify the necessity of illness to one's own advantage is a distinct human possibility. Integration again is a special function of our mental level of organization. It is interesting to observe that the somatic adaptive functions are phylogenetically determined and represent the highest and most useful struggle of the species in its survival. These are the preformed tools of our human constitution. They are genetically determined and subject to genetic variation. Because of this ancestral gift, our great new mental sphere was freed for our own concern.

We postulate that the human mind is the highest level of integration. It only, through the use of consciousness, is capable of sensing and appreciating the total struggle. There is the research need

to explore further the relationship between the integrative agency of the mind and the preformed tools of adaptation. We are discovering that the human medical character is formed in the developmental phases of this relationship, when certain organ systems dominate the scene, e.g., the oral system in the first year of life. Clinical medicine is needing greatly some understanding in the problem of character: to appreciate the true concept of individuality. Intuition has served the physician well up to this point, but it is my observation that his personal prejudice interferes with his scientific use of this intuition. Medicine must rigorously examine its inability to appreciate these observations.* It is possible that these insights threaten as seriously our clinical harmony as did Darwin's postulates threaten religious harmony.

General Considerations

It has been suggested by medical students in recent discussions that necessity connotes inevitability rather than a compelling force or principle. All agree that no consideration of necessity can avoid the connotation: inherent in the nature of, or constitution of. In this sense, for example, our students have suggested that certain categories of illness might represent constitutional anomalies which were both unavoidable and inherent, such as the failure of the blood clotting mechanism leading to the clinical entity hemophilia. So, they propose, that no serious consideration of the nature of illness can avoid the concept of the individuality of necessity. The physician begins his work here when he sees clearly this emphasis. Such a seeming philosophical, almost poetical, concept is proved to be most useful for its adds tremendously to our clinical effectiveness, and in no way detracts from our technical advances. These postulates help us continue as human, rather than be moulded as automaton. Only a growing medical student can illustrate the pain of this continuum.

Often well-intentioned treatment procedures are meddling—the attempt to get rid of (pluck out) rather than to help an individual come to terms with or grow beyond the immediate.† Always the question: "Are we giving something better?" when we suggest, remove or medicate each symptom. Is my treatment making the patient feel better—or me? There is a certain sterility in looking for causes. We live in an age where we are beginning to appreciate in the natural sciences that natural processes are governed by probability laws not by causal principles. In the appreciation of the struggle we have in living and the coming to terms with the elements of life, we try to appreciate symptoms as signs of the possibility of growth not as end points nor movements toward death. So often have I observed the physician taking the side of the illness against the nature of the patient. It is so difficult to realize that each person is doing at any one moment the best that he can under the existing circumstances. I have observed that physicians are very impatient. It is often well for me to remember that in learning to ride a horse it was a long struggle to achieve balance and direction, and this did not really happen until the horse had literally become part of me and we respected each other. How difficult it is, then, when two human beings are struggling for balance and direction. One is the physician and the other the patient.

It is a truth that one can use knowledge only if one has grown it one's self. There seems to be no alternative to this observation. Each of you has experienced in your growing, as I have, that your greatest spurt forward and your greatest strength came in wrestling with anxiety as you moved in foreign territory. Don't be afraid of it. I have noticed that the general physician is often the most curious and philosophical of his profession. I have noticed further that in his formative years he is most humane. Medical education has a tendency to lure him away from this humaneness. There are no tricks to perfection. I can only offer you the stimulus for further study groups, seminars and a continuing and constant use of personal reflection. I firmly believe that the enlightened general practitioner and the pediatrician hold the key to the problem of the preventive medical practice of the future.

(References on Page 652)

*I know of only one general hospital devoted to an examination of this observation. It is the McGregor Hospital for Health Education and Rehabilitation in Detroit. Here a research program is conducted under the auspices of the McGregor Health Fund, and the Department of Psychiatry at Wayne Medical School. The interested reader might write the hospital administrator for written reports or pay a personal visit.

†Recall the recent controversy stirred up by Dr. Paul Hawley's observations on the business of medicine.

When Hemorrhage Strikes!

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IN OBSTETRICS as in no other branch of medicine does hemorrhage strike with such violence. Probably in no other field is acute hemorrhage responsible for so large a mortality.

In 1940, in the United States, there were 2,058 deaths recorded as due to obstetric hemorrhage. For the same year, hemorrhage claimed 103 maternal deaths in the State of Michigan. In 1950, there were 536 obstetric hemorrhage fatalities in the United States and only twenty-one in Michigan.[1] These are the recorded figures and they indicate tremendous improvement. But this improvement is more apparent than real. During the years 1950-1952, eighty-nine Michigan women lost their lives because of hemorrhage. Sixteen were the result of ectopic pregnancy; the remaining seventy-three were due to other obstetric hemorrhage.[2] But, these figures do not tell the whole story. Hemorrhage deaths are not always so listed; the patient may have had other obstetric complications under which the death was recorded. Analysis of maternal death certificates reveals that more than one half are incorrect and/or incomplete. Obviously, it isn't always possible to determine accurately and record the cause of death. It is interesting but not surprising that most severe hemorrhages occur during the third and fourth stages of labor.

Furthermore, the majority follow an operative delivery of some sort. Today, many births are of the so-called "assisted" variety, consequently, these data are "weighed" on the operative side. On the other hand, study of hemorrhage deaths reveals that many were preceded by major obstetric operations, some of which, in retrospect, were unjustified or even contraindicated. The familiar *triad for trouble* is not infrequently found in *induction for convenience, desultory labor* and *operative delivery.* This is a familiar example of the "chain reaction" or events sometimes leading up to hemorrhage.

Always a major complication, obstetric hemorrhage has become the number one maternal killer. It has achieved this position as a result of many factors, some of which by their very nature are unforseeable. Others are not only predictable but, in many instances, either avoidable or preventable.

Obstetric hemorrhage is commonly described as blood loss in excess of 500 cc. Generally speaking, the amount of blood lost represents an estimate and is, therefore, likely to be grossly inaccurate. The hundreds of thousands of voluntary blood donations contributed during the past decade have proved that the average adult can safely tolerate blood loss up to 500 cubic centimeters. The pregnant woman at term is presumably better prepared for such loss, but, even so, signs and symptoms of depletion and shock develop very rapidly with every additional loss of 100 cc. above this proved human toleration point. While blood loss sets off a chain of events which, in short order, can become extremely serious and sometimes fatal, it must be remembered that hemorrhage itself is commonly the product of a chain of events. This very fact makes its discussion an involved affair. It is difficult, indeed, it is impossible to consider hemorrhage without at the same time giving thought to its etiology. Its causes and predisposing factors may conveniently be divided into the *"unavoidable"* and the *"avoidable."* In the unavoidable group, we find such complications as placenta previa, abruptio, tubal gestation, et cetera. Many of these clinical entities are so well known that I shall not mention their non-contributory aspects.

Afibrinogenemia[3] is an uncommon but highly important factor in obstetric hemorrhage. For the present, it must be classed among the unavoidable causes. Whether it be due to amniotic fluid infusion or other etiology, afibrinogenemia may cause or play an important role in maternal blood loss. Consequently, its participation should be kept in mind, especially when the maternal blood does not display rapid clotting. When in doubt, prompt evaluation of the patient's clotting time becomes imperative. In the management of these cases, it is important to supplement whole blood replacement by the administration of fibrinogen, antihemophilic plasma or other effective substitute.

To these examples of "unavoidable" predisposing causes must be added others, namely—uterine atony secondary to hydramines, multiple pregnancy, excessively large infant, multiparity,

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long difficult labor, erythroblastosis fetalis, uterine fibroids, et cetera.

Logical consideration of hemorrhage demands that thought be directed first toward predisposing factors. Unless these factors are known and given proper respect, prevention and avoidance of hemorrhage cannot be brought into play to their fullest capacity. Thus, it is well known that placenta previa and ectopic pregnancy are "dead ringers" for hemorrhage. In having this knowledge, we are frequently enabled to completely avoid serious bleeding from these powerful predisposing factors. The diagnosis of these complications is not always easy. Generally, however, there are enough signs and symptoms to give warning and make us highly suspicious. In other words, sufficient evidence is generally present to warrant full preparation against hemorrhage. The facts show that in some instances the presence of suggestive signs and symptoms do not arouse alarm. Possibly suspicion alone is, for some, an insufficient motive for discarding the cloak of unpreparedness. So long as this lethargy remains, mothers will continue to die unnecessarily.

Failure to recognize and accept these conditions as factors favoring excessive blood loss leads to inadequate preparation and failure to circumvent hemorrhage. Significant as these "unavoidable" predisposing factors are they are matched in importance by the "avoidable" predisposing factors. Some of these may be listed as follows:

1. *Unindicated Induction of Labor.*—In my opinion, induction of labor is a highly abused obstetrical procedure. When warranted, both medical (pitocin) and surgical (rupture of membranes) induction are useful and necessary, but unjustified induction has today reached the point in some parts of the country where it has become an important factor in maternal and infant morbidity and mortality. Induction may lead to a poor desultory type of labor which in turn becomes a link in a chain of events leading to such things as uterine inertia, and ultimately operative delivery. This routine and its occasional sequel, hemorrhage, is many times recorded in maternal death notes.

2. *Unjustified Operative Delivery.*—While this covers a broad field I should like to mention two aspects in particular:

(a) The uninhibited undertaking of a major obstetric operation such as internal podalic version followed by extraction; or, forceps delivery of an inadequately descended head for questionable reasons by unqualified persons and in the complete absence of preoperative preparation. The women who have died as a consequence are not all recorded as hemorrhage deaths. Yet the severe shock and rapid sequence of events leave little doubt that in some instances death was due to unrecognized rupture of the uterus and internal bleeding. With good roads, available medical assistance, more hospitals, it would seem that this chain of events should long since have become a relic of the past.

(b) A second aspect of the operative delivery factor is to be found in the "creeping forceps" type of assisted delivery which is so widespread and popular in the United States today. There appears to be little doubt that the contemporary use of episiotomy and outlet forceps has many advantages and few disadvantages. It is not my intention to discuss here the pros and cons of this procedure. However, I am concerned about the "ascendency" of this type of delivery. Time was when outlet forceps meant the forceps were applied to a fetal head which was crowning. That the hair on the infant's occiput was plainly visible with each contraction. Today, however, many physicians have gone exploring. If this head can be seen by separating the labia, the infant becomes legitimate game for the overly enthusiastic forceps wielder. This change has led to confusion and misunderstanding as to what constitutes outlet forceps. The "hunter" goes higher and higher in search of the advancing infant and, because of the speed with which the infant is born, tends to cause injury as well as upset the normal physiologic mechanism of the third stage which allows for muscle readjustment, good hemostasis and prompt separation of the placenta.

Excessive blood loss is not uncommon today. Yet this does not appear in the record as hemorrhage because it may not have reached hemorrhage proportions or else because of the common tendency to avoid the term "hemorrhage," unless there is evidence of shock.

3. *Mismanaged Third Stage.*—Proper management of the third stage has always been important. Present-day concepts regarding the physiologic changes normally occurring at this time are not yet universally ultilized. Consequently, im-

proper management of the third stage remains a potent factor predisposing to obstetric hemorrhage. A physiologic third stage is, in part, dependent upon slow delivery of the infant. The uterine muscle must have time to adjust and contract. Following slow delivery, the uterus should be palpated through the abdominal wall, and, when firmly contracted, gently squeezed and pulled upward. Limited or slight retraction of the cord suggests the placenta has already separated and removal may be facilitated by slight traction. Vigorous massage of the uterus and repeated attempts to force the placenta out by Crede pressure are both unnecessary and contraindicated. When required, careful manual removal of the placenta is both surer and safer. The common use of oxytocics during and especially after completion of the third stage is good practice.

Much more can be said regarding both "unavoidable" and "avoidable" predisposing causes, but there are other important aspects to be considered.

Attitude regarding hemorrhage has an important bearing on both its occurrence and control. It is necessary to adopt the point of view that hemorrhage can often be prevented even in the presence of serious predisposing factors. This means recognition of the predisposing factor and the adoption of a regimen of care which will minimize the likelihood of bleeding. This, in turn, calls for preparation, and these things begin in the mind. They imply a clear-cut plan of action long before the emergency arises. It means seeing to equipment, physical facilities, personnel and other possible needs. Too frequently these aspects of preparation are left to hospital administrators or to nurses who in final analysis must depend upon the clinician for a statement of specific requirements. Hospitals accepting obstetric patients can and must provide adequate facilities for good care but they may not do so unless we as physicians are emphatic and clear in voicing these requirements.

Whenever possible, the care provided by a recovery room should be included. Remember, it is not so much the room as the care which is important. No newly delivered patient should be permitted to return to her quarters until all bleeding has been controlled, excessive blood loss replaced, the pulse 100 or less and her blood pressure stabilized.

Adoption of full prevention measures include the early placement of an 18-gauge needle in an arm vein for the administration of glucose solution or, if necessary, glucose and pitocin, blood or blood substitutes. The needle should be in place and in good working order before operation, before an acute emergency arises. To wait "until there is need" for intravenous fluids may be too late. Timing is extremely important. The confusion, haste and futility of a failed transfusion because of difficulty in getting into a collapsed vein is indeed a sad and long to be remembered picture. "Cut down" techniques for collapsed veins are poor substitutes for earlier venipuncture. They generally represent another example of *too little too late*.

While these comments cannot be considered a comprehensive review of preventive aspects, enough has been said to emphasize their importance.

But, even with best of preparation considerable blood loss may still occur making its control and replacement our next objectives.

An awareness of the fact that the patient is losing an excessive amount of blood is not always promptly reached. Unless the signs and symptoms of shock appear, the unmeasured drip into a sponge-filled waste basin can be highly deceiving. Estimates of blood loss are notoriously inaccurate, a situation which probably accounts for the fact that obstetric hemorrhage is seldom diagnosed early or in the absence of shock. Even in the presence of shock, the occurrence of internal bleeding is not always suspected, the shock being attributed to other causes such as anaesthesia or trauma. Failure to recognize excessive bleeding or failure to suspect internal hemorrhage in the presence of shock contribute heavily to delay in treatment and to overlooked uterine rupture.

In general, the active management of obstetric hemorrhage depends upon prompt utilization of any or all of the following procedures.

1. Recognition of excessive blood loss
2. Determination of origin and cause. (Atony (?), tear (?), rupture (?) faulty clotting (?), et cetera
3. Medication and prompt blood replacement
4. Gentle uterine massage
5. Administration of oxygen
6. Hot intrauterine douche
7. Manual tamponade
8. Compression of the aorta

9. Uterine packing
10. Trendelenberg or shock position
11. Hysterectomy

Adequate predelivery preparation will facilitate prompt use of these measures. For discussion purposes, let us consider each procedure separately.

Little more need be said about recognition except to re-emphasize that excessive bleeding means hemorrhage and should be recognized as such even in the absence of shock. We must be more critical in our estimation of blood loss.

Most obstetric hemorrhage is the result of uterine bleeding. However, the source may be from some other portion of the parturient canal, consequently determination of origin and cause is an early prerequisite to proper management. Because this is sometimes difficult it may lead to faulty assumption and inadequate treatment.

The uterus may be atonic but the bleeding may also be coming from a deep vaginal or cervical laceration, or from a uterine tear or rupture. For these reasons inspection and visualization of the vagina and cervix *and* careful palpation of the interior of the uterus for evidence of tear or rupture is important. Under the tense and adverse circumstances engendered by hemorrhage, this can be difficult; consequently, it is well for every physician to learn how this is done by inspecting the cervix and palpating the interior of the uterus in normal cases long before it becomes necessary because of an emergency. Routine examination of the vagina, cervix and uterine cavity following every major operative delivery is not only good obstetric practice but also serves as a training maneuver. To do this is also to learn the value of proper equipment and good assistance. Once the origin and cause of the bleeding has been determined definitive steps must be instituted. Without knowledge of the source and cause, treatment is likely to be empirical and perhaps inadequate.

If anticipation has played a rôle in predelivery preparation, oxytocics will have been given and blood replacement started. The desirability of having a needle in a vein and in working order is never more appreciated than during an emergency of this sort. Since, in some communities, Group O Rh negative blood or properly matched blood is not readily available, reliance may have to be temporarily placed on plasma or other substitutes until blood can be obtained.

When uterine atony is found to be the cause of the bleeding, gentle massage of this organ is indicated, and when used in conjunction with intravenous pitocin in glucose solution, effective uterine contraction generally results. Excessive or vigorous massage of the uterus is undesirable. Such mauling and pummelling of the uterine musculature leads to damage and may actually prevent satisfactory uterine contraction and hemostasis.

When dealing with uterine atony and especially an indolent fourth stage uterus, the use of a hot (120°) intrauterine saline douche is very effective. This old standby of former days has largely disappeared. Yet, it is a safe, effective and readily administered addition to our control armamentarium. By having the simple apparatus in constant readiness, except for the addition of the hot saline solution, this useful procedure is made quickly available. Since such emergency equipment is only rarely used, its constant maintenance is sometimes resented or overlooked, something which should not be permitted to happen since a let-down in precaution may cost a life.

Manual tamponade against the cervix and uterus, by placing one hand on the abdomen over the uterine fundus and the other hand in the vagina against the cervix, permits compression of the uterus and serves as a temporary expedient for bleeding control. Considerable blood loss may be prevented by resorting to manual tamponade while preparing for use of other measures.

Similarly, compression of the aorta through the lax abdominal wall by making considerable pressure against the spine just below the umbilicus, is an alternate temporary measure—seldom needed but important to remember when every drop of blood lost brings death closer.

One of the commonest practices for the control of uterine bleeding has been packing. This highly controversial procedure has received much attention and has been the target for both praise and castigation during the past decade or two. The many arguments for and against its use have been so widely aired that their restatement here is unnecessary. Re-evaluation in the light of all that has been said for and against uterine packing plus my own experience have convinced me that it is neither a desirable nor satisfactory means of controlling obstetric hemorrhage. I am aware of the fact that many lives appear to have been

saved by it, and, many physicians still resort to packing when faced with the uncontrollable hemorrhage dilemma. Yet, the facts pretty well show that it is at best a temporary measure and a poor one at that. It interferes with the normal physiologic mechanism of uterine hemostasis. It leads to a false sense of security and actual delay in control of bleeding. A large (3 in. x 10 yd.) gauze uterine pack will absorb approximately 1,000 cc. of blood. Valuable time and additional precious blood may be lost before bleeding through the pack calls attention to its inefficacy. Even though the uterus be well packed, this procedure fails to provide assurance that the bleeding has been controlled. The development of profound shock may be incorrectly attributed to earlier blood loss when, in fact, the pack temporarily obscures the persistent ebbing away of the sap of life. If, in desperation, packing is resorted to, it should be considered strictly a temporary measure upon which no assurance or dependence can be placed.

Supplementary procedures, such as the administration of oxygen, wrapping the extremities with elastic bandages and use of the Trendelenberg or shock position, are helpful. They should not be overlooked. However, since placing the patient in shock position may interfere with manipulation necessary for the control of bleeding, its use is generally deferred until after control has been accomplished.

What about emergency hysterectomy? The decision to remove the uterus for obstetric hemorrhage is not an easy one to make. When uterine rupture has been diagnosed, laparotomy and usually hysterectomy becomes imperative, even in the presence of shock. In the absence of this positive indication, vacillation and delay is common and understandably so. Not only is hope for control of bleeding by less radical means a tenaceous habit, but further, the poor condition of the patient, inadequate preparation and limited facilities are strong dissuaders. The fact that many physicians with years of busy obstetric practice behind them have never had to resort to hysterectomy for hemorrhage, supports, but does not prove, its highly limited need. When competent trial of other methods does not give positive bleeding control, resort to hysterectomy should be given prompt consideration. A dead mother is a poor substitute for one without a uterus. Better sacrifice a uterus than a life.

As stated earlier, obstetric hemorrhage is a big subject, but regardless of cause, source or individual preferences, management boils down to these basic essentials: anticipate it; prepare for it; and avoid it if possible. When it does occur, admit it (recognition). Determine the source and apply definitive treatment. In some instances, hemostasis is easily accomplished, in other cases the entire control routine as here suggested may be necessary.

Always be prepared, for the price of safety *is* eternal vigilance.

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WHAT DO YOU DO WITH YOUR TIME?

A psychology class at the University of Wisconsin, in a survey, came up with this breakdown of the average person's seventy years of life:

Working, 20 years; sleeping, 20 years; walking, outdoor sports, 7 years; movies, other amusements, 7 years; shaving, dressing, 5 years; eating, sitting at the table, 2½ years; smoking, chewing gum, 2½ years; playing cards, other games, 2 years; telephoning, 1 year; waiting for someone to come, or something to happen, 3 years.

Obviously, then, from this survey, if you double up on these pastimes (e.g., smoke while you wait, or work), you shorten your life span. So, don't chew gum while you play cards.—*Mutual Minutes.*

Variations in Weight in Multiple Gestation

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WIDE variations in the size and weight of twins have been reported to be more likely to occur in identical rather than fraternal twins. Our first case follows this rule, but our second illustrates the exception to this rule. When one twin dies prematurely, this difference is greater and the incidence is more common than when both babies are born alive. Eastman[2] refers to Ahfeld's cases in which living twins weighed 2,320 and 1,120 and 1,920 and 790 grams, respectively. The following two cases, one of twins and the other of triplets, present babies of unequal birth weights and follow-up records of postnatal weight gain.

Case Reports

Case 1.—N. W., a twenty-seven-year-old gravida VI, para I, entered our prenatal clinic August 28, 1951. Her last menstrual period was April 30, 1951, and expected date of confinement—February 7, 1952. She gave a history of one previous normal, spontaneous delivery resulting in a 5-pound, 13-ounce baby, one year before. Spontaneous abortions had occurred in 1943, 1944 and 1945. The only significant physical finding at that time was a positive Kahn for which the patient was treated. Questioning revealed that this positive serology was first discovered in 1949; a course of treatment was given at that time.

Her prenatal course was uneventful. When last seen in the clinic December 9, 1951, six weeks before delivery, she had gained a total of 13 pounds. The blood pressure and urinary findings were consistently normal.

On January 18, 1952, the patient entered the hospital in active labor. Examination revealed a markedly enlarged abdomen suggesting multiple gestation. After two hours of progressive labor, the patient was delivered of an apparently normal male child which weighed 4 pounds, 12¾ ounces. Outlet forceps facilitated the delivery. The size of the abdomen showed little change. Vaginal examination indicated a second baby in the L.O.T. position. With the aid of the Kielland forceps, the second, apparently normal male child, was delivered, weighing 8 pounds, 5¾ ounces.

The single placenta was removed manually with a total blood loss of 200 cc. The placenta was found to be shaped like an unequal dumbbell. The cord for the first child arose from the smaller segment.

From the Obstetrical Service of the Harlem Hospital.

TABLE I.

RECORD OF TWINS FOR FIRST SEVEN MONTHS

Date	1-18-52 Birth Weight	2-29	4-15	5-27	8-25
Twin No. 1	4 lbs. 12½ oz.	5 lbs. 4 oz.	8 lbs. 2 oz.	13 lbs.	16 lbs.
Twin No. 2	8 lbs. 5¾ oz.	10 lbs. 3 oz.	12 lbs. 12 oz.	14 lbs. 13 oz.	18 lbs. 4 oz.

TABLE II.

BIRTH AND FOLLOW-UP WEIGHTS OF TRIPLETS

Dates of Clinic Appointments	10-9-51	12-12-51	1-29-52	3-18-52
First Child Birth Weight 5 lbs., 9½ oz.	11 lbs., 14 oz.	13 lbs., 6 oz.	16 lbs., 13 oz.	19 lbs.
Second Child Birth Weight 5 lbs., 13½ oz.	11 lbs., 4 oz.	15 lbs., 4 oz.	16 lbs., 6 oz.	18 lbs., 3 oz.
Third Child Birth Weight 8 lbs., ½ oz.	13 lbs., 7 oz.	14 lbs., 8 oz.	16 lbs., 3 oz.	18 lbs., 13 oz.

Follow-up examinations of mother and babies revealed nothing remarkable up to the sixth month (Table I).

Case 2.—B. M. W. registered in the outpatient clinic on February 27, 1951. The history revealed that her last menstrual period was October 1, 1951; expected date of confinement—July 8, 1951. Her only previous pregnancy resulted in the normal spontaneous delivery of a female child weighing 7 pounds, 8 ounces, on July 11, 1950.

Preliminary examination revealed that the uterus was much larger than the period of gestation indicated that it should be. The laboratory findings were: urine—negative; blood Kahn—negative; type B, Rh positive; hemoglobin—85 per cent and blood chemistry—normal.

The clinical course was uneventful until the sixth month when pedal edema and rapid weight gain were noted. Temporary response was obtained from a low calorie, salt-poor diet. Roentgenograms at that time revealed triplets.

On June 15, 1951, the patient was admitted to the hospital. The blood pressure on admission was 120 mm. systolic and 90 mm. diastolic. Over the next few days, the blood pressure and uric acid level showed a gradual rise, reaching a height of 142 mm. systolic and 100 mm. diastolic and 5.6 mgms. per cent respectively, on June 28, 1951. Except for occasional bouts of dyspnea, there were no subjective symptoms.

Labor began spontaneously on July 5, 1951. Within three hours, the patient was delivered spontaneously, as a vertex, of a normal male child weighing 5 pounds, 9½ ounces. The second male child, delivered by internal podalic version and breech extraction, weighed 8 pounds, 13½ ounces. The third child, also delivered by internal podalic version and breech extraction, weighed 8 pounds, ½ ounce. Two placentas were expressed. Arising from the larger of the two placentas, were two umbilical cords that had been attached to the first two infants. The

umbilical cord of the third infant was attached to the smaller placenta. The placental weights were 3 pounds, 4 ounces combined. Total estimated blood loss was 200 cc.

The postpartum course of the mother as well as the neonatal courses of the triplets were uneventful. The mother was readmitted to the hospital in July, 1952, with acute congestive heart failure (Table II).

Comment

The single ovum twins of the first case presented a birth weight difference of 3 pounds, 9 ounces, which is an unusual difference in living babies. Although they shared the same placenta, its unequal division undoubtedly accounts for this discrepancy in weights.

The second case is one of two egg triplets. The first two, sharing a single placenta not much larger than that of their fraternal brother, showed individual weights that are significantly less than the weight of the single ovum baby. Here, too, placental size influenced birth weight.

Tables I and II present the follow-up weights of both groups of babies. In both instances, when the full nutritional requirements were met, the growth potential was able to assert itself. In the first case, the weights were nearly equal in six months. At that time, the lighter twin became ill with a gastrointestinal upset and a hydrocele became apparent. The influence of these conditions is shown in the widening gap between the weights at the seventh month. In slightly less than six months, the weights of the triplets approached uniformity. It is interesting that the triplet who was smallest at birth, finally outweighs the other two. We found no other case of full-term triplets reported in the literature.

Recent works by Baird[1] suggest that while it may be easy for an infant to overcome the retarding influences on height and weight, there may be other developmental factors permanently impaired by such intrauterine handicaps.

Another noteworthy aspect of the second case is the large weight of the solid products of conception. The total weight of the three babies is 19 pounds, 7½ ounces. When the total placental weights of 3 pounds, 4 ounces are added, a total of 20 pounds, 11½ ounces is reached. While this does not equal the record that the uterus has been known to contain, this toal is unusual for triplets. We were unable to find a case of three full term triplets reported in the literature.

Summary

We have presented two cases of multiple births, each of which exhibited marked differences in birth weights. In both cases, the placenta was apparently responsible for the variation. Follow-up studies indicated that, all things being equal, the handicapped child reaches normal size and weight in approximately six months. Our second case is an unusual one of full term triplets.

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1549 W. Grand Boulevard

INHALATION THERAPY

(Continued from Page 632)

irritation, it was found that the use of the inhalations before the seasonal attacks appeared, proved helpful as a prophylactic, several of the cases remaining almost entirely free for the season.

The patient is instructed to always take the inhalations deeply but slowly, giving the medicated air a better opportunity to spread into all the recesses of the nares and throat. It is important that the patient be given definite instructions in the use of the inhalator, and the time and mode of application.

The different formulae employed are quite stable, but to make sure that the medication shall not lose its efficiency they are supplied in a sealed inhalator which is discarded after a month of regular use. In the hyperaesthesias, where the inhaler is used more frequently, one supply may last only a week, while in the chronic type of cases, it may suffice for a whole month's treatment.

The question as to the permanency of the results secured, in the chronic and hyperaesthetic cases, only time will tell, but the uniformly favorable results obtained, together with the convenience and economy of the method should prompt the physician to give it a trial.

132 East 12th Street

Detroit Physiological Society

MEETING OF MARCH 18, 1954

The Value of Antihistaminics in the Prevention of Blood Transfusion Reactions

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The recent wave of enthusiastic advertisements praising the use of injectable antihistaminics for the prevention of not only allergic, but also pyrogenic, reactions led the authors to analyze the characteristics of Benadryl in this respect.

By using Ham's modification of Bing and Baker's method for the determination of free plasma hemoglobin, it was first shown, that the addition of 50 mg. Benadryl I.V. to 500 cc. whole stored blood was safe and did not produce increased hemolysis.

The experiment covered a period of sixty-five days in which 1,439 blood transfusions were administered at Receiving Hospital. Of those, 948 transfusions belonged to the experimental group, with 495 "Benadryl treated" and 453 "Saline treated" transfusions. The survey team did not know to which blood the placebo or the Benadryl was added.

In the "Benadryl treated" group of 495 transfusions, eleven pyrogenic, no allergic and one questionable hemolytic reaction were observed. In the "Saline treated" group of 453 transfusions, nine pyrogenic, five allergic and no hemolytic reactions were observed. Benadryl, therefore, did not reduce the incidence of allergic reactions from 1.1 per cent to 0 per cent.

The above findings were made more convincing by a parallel animal experiment, in which rabbits, which were previously protected by either 5 mg/Kg pyribenzamine, 1 mg/Kg Chlor-Trimeton-Maleate or 5 mg/Kg Benadryl, were subsequently given a known pyrogen solution MI-3 I.V. The antihistaminics failed to alter, reduce or abolish the usual pyrogen reaction.

Increasing Importance of Lung Cancer As Related To Metastatic Brain Tumors

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Henry Ford Hospital

Evidence is accumulating rapidly in the medical literature that lung cancer has been undergoing an absolute increase in frequency. A survey of 102 metastatic tumors of the brain, found during the past twenty-six years at Henry Ford Hospital, indicates that cancer originating in the lungs has become the most common primary site in males and is second only to breast cancer in females. A statistical survey based solely on autopsy findings shows a marked rise in the incidence of pulmonary cancer in males during the same twenty-six-year period. Pulmonary cancer accounted for 25 per cent of intracranial metastatic lesions in this series, and 55 per cent of pulmonary cancers in which the necropsy included study of the brain were found to have cerebral metastases.

The possibility is discussed of combining surgical extirpation of a solitary metastasis with a definitive surgical attack upon the primary site of growth, and many successful examples are cited. The importance of early diagnosis and effective treatment is emphasized by an average of only six months between the onset of symptoms and death with cerebral metastases.

Fat Embolism and Blood Particle Agglomeration

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Wayne County General Hospital

Fat embolism is a neglected but often fatal complication in about 50 per cent of cases of persons who have suffered moderate to severe injuries. About 15 per cent of such cases show

clinical manifestations, and five per cent die with sufficient demonstrable plugging of capillaries in the lungs, brain and other areas to justify assigning a major role to such interruptions of the blood flow. Although the fat from the marrow of fractured bones is generally blamed, this condition arises also in cases showing no broken bones or damaged tissues. This has led to a renewed study of the normal chylomicron (fat droplet) emulsion in the blood as the source of most of such fat. This emulsion is formed from ingested fat in the intestines, is absorbed as such, and appears in particles 0.5 microns in diameter in the blood, where it is stabilized by serum proteins and phospholipids. The rise and fall of the chylomicron tide is governed by many factors—ingested lipids, mobilization from depots, deposition in depots, hydrolysis, metabolism of fats, etc. Stresses of varying sorts play an important role in modifying blood lipid concentrations in response to changed energy demands. It seems probable that fat emboli may be really "fat thrombi" in which the formed elements are caused to adhere to each other and to vascular surfaces as the colloidal stabilities of all such surfaces are lowered by increased blood lipids in stress. These factors are relevant also to phenomena of blood clotting, thrombus formation, arteriosclerosis and other abnormalities in the sol-gel state of the blood.

Thrombosis of the Pancreatic Veins as an Etiologic Factor in Acute Necrotizing Hemorrhagic Pancreatitis

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We have produced acute hemorrhagic necrotizing pancreatitis in dogs by inducing thrombosis of the pancreatic veins. This work, along with that of others, emphasizes the etiologic importance of vascular factors in acute necrotizing hemorrhagic pancreatitis. Venous thrombosis, although observed both clinically and experimentally, has not been seriously considered as an etiologic factor. We believe it should be.

THE NECESSITY OF ILLNESS

(Continued from Page 643)

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Blue Cross-Blue Shield

Any word of commendation for Michigan Hospital Service and Michigan Medical Service directed to the medical doctors of the state of Michigan would seem superfluous, like gilding the lily. However, now that we can look back some dozen years on the origin and growth of these two service organizations, dedicated as they are to wider distribution of good medical and hospital care for our fellow citizens, there is every reason for the medical profession of our state to be proud of its part in their origin and success.

It is well for us to remember that the plans for voluntary, non-profit, prepaid, medical and hospital care in our state were worked out and presented to the Legislature at Lansing by the medical profession. The necessary funds to back Michigan Medical Service were advanced by the Michigan State Medical Society. In this new and unexplored field, insurance companies did not do the pioneering; it seemed to them too risky from a financial standpoint. Many dire predictions were made both inside and outside of the medical profession regarding the outcome of this venture by the medical profession into the group medical care field.

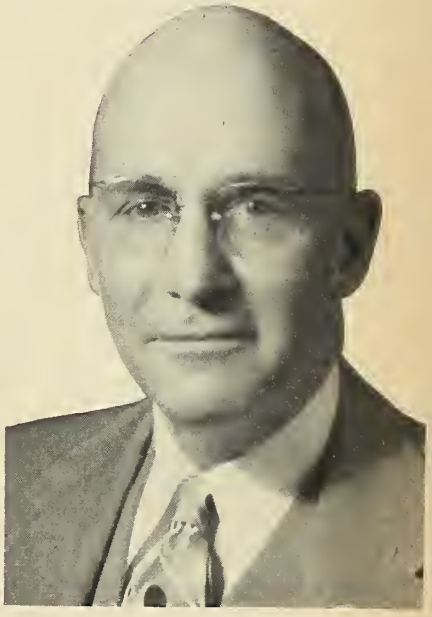
The late Senator Arthur H. Vandenburg said that in Michigan Hospital Service and Michigan Medical Service, the medical profession of Michigan has a great public trust. Let us treat them as such.

Why not tell our patients, when the opportunity presents itself, something of the history of Blue Cross-Blue Shield here in our home state? Let our friends know that the House of Delegates of our State Medical Society is the membership of Blue Shield. A little bragging won't do any harm. Most of us are prone to take our two great service organizations too much for granted.

L. W. Hull

President, Michigan State Medical Society

President's Message



Editorial

NATIONAL LEGISLATION

Social Security

THE PRESIDENT in his program for the Health of the Nation has proposed several plans which are now in consideration by the Congress. One of the most far reaching is his suggestion that the medical profession, as well as law, dentistry, and other self-employed groups be brought under the Social Security program. The professions have asked repeatedly and successfully to be left out of that plan. The medical profession is peculiarly not suited for that program. Very few doctors retire at the age of sixty-five, which is required if one is to benefit by the plan. If included, we would have to pay our proportionate percentage on earnings up to $3,600 per year, maybe $4,200 next year. Under the law we can become beneficiaries after sixty-five only by earning less than $75 per month. Since no doctors retire at age sixty-five, we would have to pay the tax without possibility of sharing in the rewards. We believe this restriction should be removed whether we join or not. The medical profession would be willing to have the joining of this group made voluntary. If a doctor chose, he could be a social security beneficiary.

Reed-Keough Bills

THE MEDICAL profession and other self-employed groups, for several years have been advocating the establishment of a plan represented by the Reed-Keough Bills, whereby these groups who have relatively short years of higher earning power be allowed to set aside tax free, and invest in regulated and supervised securities, a certain proportion of their earnings to establish retirement or old age resources. We are asking nothing more than justice and fair play. Executives and salaried men in industry have been allowed that privilege for many years. The employer may set aside and charge as expense sufficient funds to provide the costs of those retirement benefits. The employed person gets the benefit when he is actually retired or has served sufficient number of years to build up reserves. Not only is this benefit available to the salaried personnel, but practically every labor union for a long period has specified in its contracts that retirement programs guarantee a specified amount monthly to be provided by adjusting the social security allowance upward through management adding to the amount, all this of course to be charged to expense.

The self-employed groups have been backward. We have asked for certain benefits according to the Reed-Keough bills but have watched industry and labor actually secure corresponding benefits. Labor and industry have been much smarter than we. The Reed-Keough bills are only providing for fair play. There would be some income tax loss at first, to be regained in later years. The government is finding ways to allow these other groups to charge to expense the funds necessary to provide for superanuated labor and management. Why not the professions? The amount of money we are asking to be exempted from tax is so insignificant in comparison. Labor or salaried men in industry are no more worthy than self-employed professional men but many of them have retirement resources arranged to pay them up to $40,000 a year. (See the financial and proxy statements of many of the great industries: General Motors, U. S. Steel, A. T. & T.)

Every dollar these great companies are allowed to set aside to build retirement or old age benefits costs the federal government at least fifty-two cents in reduction of income taxes, which in industry begin at 52 per cent. The tax exemption of our modest group of self-employed professional people would begin at 20 per cent. Why should we not demand? Labor has demanded, and got its allowance. Industry in providing for its salaried groups has been granted tax exemption. These two demanded.

REINSURANCE

THE PRESIDENT, in his message on the Health Care of the Nation, suggested aid be given to the voluntary health service plans to permit a more rapid growth, provide for the furnishing of prepayment of some groups and areas not at present available, or as to assure health care for those not in a position to provide for themselves. He suggested making available through research, advice and information aid to plans to achieve more

rapid advancement. He also suggested a complicated scheme of reinsurance.

In making the plans, the Administration very largely ignored the very ones who, by their innate determination and drive, had demonstrated against tremendous odds the insurability of health hazards. Without the advice of Blue Cross-Blue Shield pioneers where will the Health, Education and Welfare Department turn for its offered advice and guidance? Where will it turn for the know-how of administering prepayment health plans, voluntary or otherwise? The department did invite in a committee of eight advisors, two Blue Cross, one Blue Shield, after their bill was written in an attempt to make it workable.

We have studied with intense interest the proposed reinsurance and are unable to find any promised help for the medical service plans which is not already available without the interference and hindrances of government trying to enter the field. Our plans have succeeded without this type of subsidy, and fear the consequences if that is forced upon us. The Bill does not say "compulsory," but does throw controls into the hands of the Secretary of Health, Education and Welfare. If the bill is to be passed, it needs some specific and definite changes.

One field of help which the President did hint at seems to be securing some attention. We have suggested in our comments that care of the needy, the medically indigent, old age assistance, dependent children, handicapped and other wards of the State might well be given some hope. We doubt if it would cost much more to use the money now spent through federal, state and local governments for the inadequate and very unsatisfactory care now given these people to pay their insurance premiums and give them the same care now available to all insured persons.

A special committee of the Hoover medical task force has been appointed under the chairmanship of the Right Reverend Donald A. McGowan to study the extent that voluntary health insurance could be used for the care of veterans, dependents of military personnel, merchant seaman, and other United States dependents. The other committee members are H. B. Mulholland, M.D., Manton Eddy, Jay C. Ketchum of Michigan, and E. A. Van Steenwyk, M.D. This study could well include the groups which we have mentioned. The objective is similar.

Such are the problems presented. They can be solved with a spirit of co-operation and mutual helpfulness, remembering that the government must recognize and authorize the use of the insurance principle, and forget the Supreme Court decision that whatever the government subsidizes it may control. It must recognize fully that supplying insurance aid in any form is not a subsidy.

TAX ON MEDICAL EXPENSES

THE MEDICAL profession has advocated for years that some relief be given the unfortunate persons who must meet large health care bills. We are referring to the proposal to reduce from 5 per cent to 3 per cent the allowable reduction of health expenses of any family when paying their income taxes. We would exempt such expenses completely. In the families where this would make any appreciable difference the tax loss to the government would be negligible, and the benefit to the poor taxpayer would be tremendous.

HYDATID MOLE AND CHORIOCARCINOMA

(Continued from Page 608)

ly a currettage will suffice for a mole followed by biologic tests. Choriocarcinomas warrant hysterectomy even though pulmonary metastases are known as there are reported cases of spontaneous regression of the metastases and apparent cure following the removal of the primary lesion. Since this can occur, the significance of reported cures of pulmonary metastases by radiotherapy or lobectomy is to be questioned. Some have recommended hysterectomy in choriocarcinomas only as a measure to prevent early death from hemorrhage.

To summarize: Most choriocarcinomas that are correctly diagnosed die and practically all moles treated conservatively live.

Whatever success can be achieved in the control of respiratory cancer depends mainly upon continuing popular education in the symptoms of the disease and the promotion of measures for early detection and treatment.

* * *

Periodic medical and x-ray examination of every person is the most productive means of detecting respiratory cancer in early stages.

* * *

Cancer, like infection, is not a single disease. Exactly as measles and typhoid fever give rise to different symptoms, though both are infectious diseases, all of the forms of cancer, though basically similar, differ from each other in detail. Each form may, therefore, require for its control a somewhat different approach.

The Man for the Job

By Patrick J. Kremer

"And belief that stood on unbelief
Stood up iron and alone."

—G. K. Chesterton, *The Ballad of the White Horse*

HISTORY has a way of finding the man it needs for any job. In 1940 the doctors of Michigan launched a social effort that is truly historic, a voluntary prepayment plan for medical care, called Michigan Medical Service. Much thought and planning had gone into the organization, but even so the doctors realized that they were taking a huge risk, a risk so great that no one else was willing to assume it.

It was a step into the unknown. No actuarial data existed on which to base the rates. No experience of the use of services was available. Nobody could know how the public would respond to the Plan. It is not surprising, then, that during this time of trial and error the Plan fell upon hard times. Within little more than two years its debt reached the one-half million dollar mark. It turned desperately from one expedient to another, while its critics became more outspoken and even its closest friends lost hope.



In 1945 Dr. Novy had the pleasure of repaying to the late Dr. Andrew S. Brunk, then President of the Michigan State Medical Society, $17,554.45, money which had been advanced to Michigan Medical Service by the Society for the purpose of getting it started and to help with certain other expenses incurred along the line.

Dr. Robert L. Novy was one of the most active and vocal critics, but he was also one of Blue Shield's closest friends. For both reasons, perhaps, he was elected President of the Plan in 1942. "For talking too much," he says, "I was elected President." There's more to it than that, however.

Dr. Novy was exactly the kind of man needed to make the Plan succeed at that time. Now that trial had proved where errors lay and valuable experience had been accumulated, the principal need was for fresh determination and new courage to go on, profiting from the experience gained. Dr. Novy was the man to inspire those qualities.

He is a firm and determined man, at times even an obstinate man. He was completely convinced that the prepayment principle could be made to work. And he had the courage to take up the challenge, however gloomy the outlook. The doctors knew what they were doing when they turned to Bob Novy.

The first thing he did was to hush the keening of the mourners, which had already begun to sound, and inform them that it was too early for the wake. Then he started treating the sick organization as he would a sick patient.

In the struggle that followed, all the characteristics that mark the man were brought out prominently. His methodical approach (he will take an hour to get a patient's history, which he writes out in longhand) stood him in good stead.

So did his diagnostic skill, which enabled him to locate the sources of Blue Shield's ailments from the experience gained in the first two years of operation, and, with the help of the Board, the doctors and Blue Shield employes, to give them consistent treatment. He was not content to act on any second-hand information—he is always impatient of gossip because it is not scientific knowledge—but assembled and examined all pertinent data for himself.

Since he is so resolute a man, the challenge appealed to him, as a challenge always has. When

he was in charge of Cardiology at Barnes Hospital, he used to insist on doing all mechanical repairs on the old EKG machine—and kept it going long after it might have been junked.

in his own ability, and has had a stubborn determination to make the Plan succeed. These qualities Bob Novy has been developing all his life.

One reason for his confidence was the fact that



A plaque awarded to Michigan Medical Service in recognition of its being the first Blue Shield Plan to enroll one million members was presented to Dr. Novy by Paul Hawley, Chief Executive Officer of the Blue Shield Commission, at the Annual Conference held in French Lick, Indiana, in 1948. Dr. L. Howard Schriver, President of the Blue Shield Commission, and Jay C. Ketchum, Executive Vice President of Michigan Medical Service, look on.

Thus, when many of his friends, like Job's, shook their heads and expressed sorrow that he was devoting so much effort to such a hopeless endeavor, he was all the more stimulated to continue.

The results are history. With the Board, the doctors and the administration of Michigan Medical Service all pulling confidently together, by the end of 1945 Michigan Blue Shield had doubled its membership to nearly 800,000. All debts had been paid, all loans returned. And the cupboard, far from being bare, held a reserve of $695,175!

As the crisis passed, steady growth followed. In 1948, Michigan Medical Service became the first Blue Shield Plan to enroll one million members. Still running in front three years later, it signed the two-millionth member. Today nearly 3,000,000 people are protected under the Michigan Blue Shield Plan.

Others may be surprised at the steady growth the Plan has made from so insecure a beginning. Dr. Novy is not, because he has always had a quiet confidence both in the prepayment principle and

he knew the doctors of Michigan and they knew and trusted him. Ever since he began practice in Detroit in 1922, as an associate of Dr. Ernest Haas, he has been active in the medical affairs of the community.

He was accepted early on the staffs of Receiving, Harper and Herman Kiefer Hospitals. He served from the start on various committees of the Wayne County Medical Society and soon was elected delegate to the Michigan State Medical Society. For more than twenty-five years, he has been among the top ten delegates elected. He is also Michigan delegate to the American Medical Association.

He started instructing in Clinical Medicine at Wayne University Medical School in 1922, and is still listed as a professor. In 1940, he was appointed to the Detroit Board of Health and has served continuously since.

During the depression, when voluntary prepayment plans were being made ready, he was in the thick of the discussion, often as devil's advocate. All of which reasons led the State Society's House



At the age of two, the famous Novy jaw was already coming into prominence. Here young Bob is shown with his mother at grandmother's house.

of Delegates to elect him to the Michigan Medical Service Board of Directors in 1941 and to the presidency the following year.

As for his determination, he was born determined. His early pictures show the same square jaw whose outthrusting today is a signal that the fur is going to fly. That he was born on April Fool's Day in 1892 is one of Nature's little jokes.

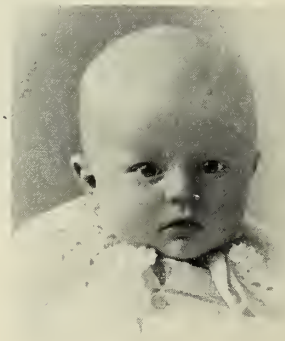
His father, Dr. Frederick G. Novy, is a world famous bacteriologist, known and respected by thousands of medical students whom he taught during his many years at the University of Michigan. The elder doctor—he celebrated his eighty-ninth birthday last December—is now Dean Emeritus of the Medical School.

Bob's mother took up the study of medicine, but didn't like it at all. Her solution was easy: she married the professor. Both her parents were doctors, her mother graduating from the School of Homeopathy in Boston at the time she was raising a family of four, while her father was among the first to graduate from the University of Michigan Medical School.

All of the five Novy children are Michigan graduates, and all either became doctors or married doctors. Besides Bob, there are Dr. Frank of Saginaw and Dr. Fred, Jr., of Berkley. His sister Marguerite married Dr. Warren C. Lambert of Marquette, while Frances married Dr. A. W. Diack of Portland, Oregon.

To complete the picture of this remarkable medical background, Dr. Bob met his wife, Elsie Lois Backus, while both were attending medical school. And *both* of her parents were doctors, her mother having been resident in charge of the Women's Ward of the University Hospital in Ann Arbor.

His father took Bob everywhere, beginning with a camping trip on Dr. Arch Walls' father's farm at Orchard Lake when the youngster was only three months old. The little party lived in a tent which the Professor had stitched together himself. Bob was to camp out in that tent all through his boyhood, and came to have a love of camping and hunting as boyishly enthusiastic today as it was fifty years ago.



Young Bob at the age of three months had no hair. His mother had to be sure to keep a bonnet on him whenever he was outdoors. Once he did get hair, however, it came to stay.

The family dwelt in a big house in Ann Arbor, where the yard served as a camping ground. The boys built tree-houses, their Dad holding them up so that they could drive the nails. In warm weather, they lived Tarzan-style or on the ground in their tent.

As soon as he was ready for it, Bob was given a slingshot, presently received an air rifle and later a .22 rifle. Thus armed, he went out on Sunday afternoons with his Dad, tramping along the Ann Arbor overflow. One day he bagged a mink. The Professor popped the little animal into his umbrella, carried it home in this improvised game pouch. Stuffed in the University lab, the mink was one of the first pieces of furniture Bob introduced into his own home after he married.

The thrill of a boy's life was a special license he received from the State Conservation Department to shoot all kinds of birds. The license was

given to him because his father was at the time studying tropical diseases brought back from the tropics in the blood of birds. Bob had stringent instructions from the Professor that he was to shoot no birds, or game of any kind, except for scientific purposes or for eating. As a result, he has eaten blackbirds (though not baked up in a pie), sparrow sandwiches, and even crow.

Besides this contribution to science, he also raised guinea pigs, white mice and rabbits, which he sold to the University laboratory. All went well except on the few occasions a mouse would escape and set up housekeeping for itself in the front closet. Then Bob's mother bore down.



A family portrait in 1904 included Bob, Marguerite, Frederick and Frank. Bob was mighty proud of that gold watch chain, even wore it outside his coat.

Well she might, for the Novys' was a very orderly household. There was a scheduled time for everything and an approved *modus operandi.* Undoubtedly, Dr. Novy's love of order and systematic approach stem from those early days. He never does anything accidentally. Before he ever buys a rug, for example, he and Mrs. Novy study the history of weaving and kinds of carpeting thoroughly. It is this approach which enables him to handle all the jobs he takes on.

Much of it he learned from his father, whose inseparable companion he was. On various occasions he and his Dad and brother Frank trekked through Yellowstone Park, traveled down the Panama Canal, and attended one of the first aviation expositions in Boston.

An interesting sidelight of the trip to Boston occurred several years later. Because of his continuing interest in aviation, Bob became secretary-



Bob and his brother Frank, born just 22 months apart, were inseparable companions. They seem also to have patronized the same tailor.

treasurer of the first organization to build an airplane in Michigan, a group of students who did their work in the loft of the Engineering Building. Bob received a silver medal for his contribution. The pilot was not so lucky: the plane rose thirty feet, then crashed, and he suffered a broken arm.

In 1897, the family went to Paris for six months, while the Professor studied at the Pasteur Institute. The Novys made many trips through the French countryside on bicycles. The professor had seats fore and aft on his bike, for Bob and Frank, while Mrs. Novy peddled her own cycle. Bob learned French; but for some reason known only to the mind of a boy, always refused to answer a question except in English.

The same dominant disposition was displayed in Ann Arbor the following year. He was taken to the old Jones School by his mother, but balked at the very threshold of knowledge. Rather than enter the classroom, he grabbed hold of the coat hooks in the hall and held on for dear life. Eventually his mother pried him loose and took him home. There he was "dealt with by his father" and sent back, this time to stay.

He settled quietly enough into the routine of



Dr. Frederick L. Novy, Sr., and his wife celebrated their Golden Wedding Anniversary on June 30, 1941. Grouped around them are Marguerite, Fred, Jr., Frances, Frank and Bob.



At 15, Bob showed little or no strain despite the fact he was carrying almost a double load in school in an effort to get it over with as soon as possible.



Bob looked like this about the time he graduated from Ann Arbor High. He did not look a great deal older when he became President of MMS in 1942.

grade school, but in a short time he got to thinking. Why spend so much time here? Since there appeared to be only one way to beat the system, he took it with single-minded purpose. He attended summer school in Ypsilanti, skipped a grade.

In Ann Arbor High he went even farther than that. By taking twenty-nine hours instead of the required fifteen, he cut another year off his school time; thus he graduated in 1909. Even so, he found time to captain the school gymnnastics team, specializing in the horizontal bars.

That summer he became a sort of *coureur de bois* at a fishing resort in Les Cheneaux Islands. All day long he rowed guests on the lake, baited their hooks and removed the perch or muskellunge they caught. These duties would seem to make a rather full day, but they were only the beginning; he also had to clean the catch. Sometimes a boatload of fishermen might take as many as 300 perch!

Bob reached the point where he could clean a perch a minute, but at that speed he occasionally removed some of the Novy epidermis along with fish scales—and he has scars on his hands to prove it.

After this busy summer, he matriculated at the University of Michigan, not in the pre-medical course, as you might expect, but majoring in chemistry. A sophisticated native of Ann Arbor, he expected to escape the usual freshman hazing. There he was fooled. One day the sophomores caught him, drove him up a tree and kept him in that undignified position, an unwilling Zacheus, for quite some time.

When it came to classes, though, Bob was no longer up a tree. In fact, he instructed in general chemistry and qualitative analysis even while he was attending school. He was also a member of the University fencing team. His greatest delight, however, was to don a white coat and putter around in the laboratory. So much did he enjoy the work that, after he took his Bachelor of Arts degree in 1913, he stayed on another year to earn his Master of Science degree in organic chemistry.

As a graduation gift from his parents, he received a trip to Europe. He walked through Germany, France and Switzerland, had a grand time. He perfected his German so well that, when he moved on to Czechoslovakia, he ran into trouble. The Czechs, whose love for Germans is not excessive, mistook him for one of their enemies and treated him quite coldly.

Everywhere he went, Bob kept a detailed account of his expenses, lived within a tidy budget. He often slept in attics and dined on bread and sausage in the park. The practice was fine training in thrift for him, but later proved an albatross around the neck of his brothers and sisters. For, as each of them received the same gift on graduation, they were expected to keep within the same limits Bob had set for himself, That wasn't so good.

A like economy showed itself in his first job. He became an instructor in charge of pre-medical chemistry, assisting in physiological chemistry, at the University of Iowa. At that time his plan was to make teaching his career. He would have done well at it, too, for he saved half of his salary for that year.

Even with so auspicious a start, however, he decided to reject teaching in favor of medicine and entered the University of Michigan Medical School in the fall of 1915. Just what prompted the decision is not clear. Perhaps he had not chosen medicine in the first place simply because everyone expected him to follow his father. Then, having proved his independence, he could take up the career he really wanted. It's possible.

On the other hand, he may have felt that teaching was not enough to satisfy his insatiable curiosity. He had to go farther and put into practice the knowledge he drew from textbook and laboratory.

Whatever the reason for his choice, he had no sooner begun his medical studies than he was interrupted. Hermes had to yield to Mars.

On his trip to Germany, Bob had been impressed with German military strength, against which our own lack of preparation stood out nakedly. Consequently, he had enlisted in Company I of the Michigan National Guard, with which he trained each summer at Grayling. Suddenly, the order came to mobilize; the Guards were directed to the Mexican Border, where they were to assist in the pursuit of that wily bandit, Pancho Villa.

Bob was delighted at the news. He rushed home in the middle of the night and dragged his metal foot locker all the way down the stairs. His Dad, awakened by the clatter, stuck a sleepy head out the bedroom door. When informed of the cause of the commotion, his fatherly benediction was only, "Thank God, at last you're mobilized."

Actually, the campaign made little difference in the young medic's life. He was assigned to the regular army laboratory at El Paso, working under then Major Charles Franklin Craig, well known author of several works on tropical diseases. Feeling that Villa had little to fear from him there, he sought unsuccessfully to win an appointment from the ranks to West Point. Instead he was sent back to medical school at Ann Arbor on an accelerated program.



Pancho Villa had better look out. That was Bob's thought when he was sent to the Mexican Border in 1916, but instead he was assigned to an Army laboratory in El Paso.

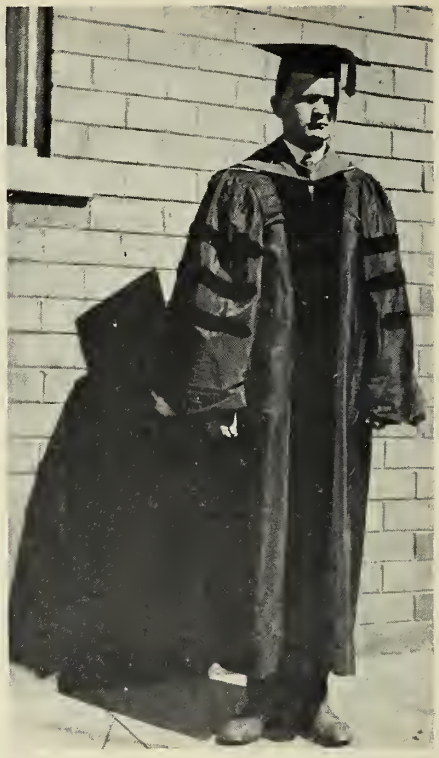
The pace was fast and furious. Classes began at seven o'clock in the morning and continued late into the day. In off hours, he headed the military company in their drills. And he even taught advanced bacteriology while himself a student.

In the midst of all the activity, his thoughts strayed from time to time. Specifically, they strayed to Miss Elsie Backus, another medical student—and his attentions were not unappreciated.

"Bob cut a romantic figure," recalls Mrs. Novy.



Robert L. Novy took Elsie Lois Backus to be his bride on October 7, 1916, when both were in medical school. They had two children by the time Bob got his M.D. degree.



Pushing through medical school on the Army-accelerated program, Bob graduated in 1919. The hoods over his gown represent his Bachelor of Arts and Master of Science degrees.

"He wore a distinguished fedora, while most of the other students had little knitted caps. His teaching experience and previous degrees added to the lustre too."

Theirs was an outdoor courtship. Mrs. Novy recalls only one movie and one dinner engagement. Instead the young couple took canoe trips or long walks. One day they hiked sixteen miles to Ypsilanti and back, which would seem to be a true test of love, if ever there was one.

"Bob didn't sweep me *off* my feet," says Mrs. Novy. "He swept me *onto* them."

They were married October 7, 1916, and set up housekeeping in Ann Arbor. Soon the doctor was in the midst of some research for which he needed rats. Mrs. Novy remembers her front porch filled with occupied rat traps brought there by grocers and butchers. She sighed a bit, but shrugged her shoulders. It was part of being married to a doctor.

She learned more of what being a doctor's wife entails after Bob received his M.D. degree in 1919. (Mrs. Novy, besides a degree in music, has both an A.B. and M.S.) The young doctor interned at Peter Bent Brigham Hospital in Boston under the celebrated internist, Dr. Henry Christian.

Dr. Christian believed that there was no easy way to learn the science of medicine. Stern and meticulous, he ran his young men ragged, insisting that they do much of their own laboratory work, that they record extensive case histories, that they take nothing for granted.

Pictures of Dr. Novy from that time show a worn and harrassed young man. But he learned diagnostic medicine.

He spent a short time at Boston City Contagious Hospital, too, where his work was principally with children. In 1921 he moved to St. Louis, where he intended to work with the famed cardiologist, Dr. Frank Wilson. Ironically, Dr. Wilson trans-



Dr. and Mrs. Novy pose with their four daughters in 1927: Barbara J. (now Mrs. Norman R. Tabor), Frances (now Mrs. John F. Orr), Elsie who teaches in San Diego. and Dorothy (now Mrs. Russell E. Wilson).

ferred to Ann Arbor the day before Dr. Novy arrived.

Dr. Novy had a double job in St. Louis. He was fellow and instructor in cardiology at Washington University and at the same time in charge of cardiology at Barnes Hospital. His interest in this branch dated from his research days at Michigan. There was in the laboratory an old EKG machine which was continually acting up. A good mechanic, the doctor was brought in to fix it. He became so interested in what the machine would do that he decided to specialize in cardiology—and so to Barnes.

It was after the final year of training in St. Louis that Dr. Novy came to Detroit in 1922 and began his practice.

He was already an established family man. Two daughters, Dorothy and Elsie, had arrived even before he graduated from medical school. Then came two more girls, Barbara and Frances, to be followed by two sons, Robert L., Jr., and Frederick. As each child arrived, the doctor's busy life took on a new bustle—and a new glow too.

He couldn't be with his family enough. Every Sunday he took them for a ride in the car, ending up at a lake for a swim or picnic.



And here are the two boys, who were later arrivals, posing just as their Dad and Uncle Frank had posed many years before. Robert L., Jr. (left), is an M.P. with the Army in Japan. Young Fred is a senior at Vanderbilt and in the Marine R.O.T.C.



The doctor spent many hours tramping in the woods around Hope Bay with his sons, teaching them how to hunt, and giving side courses in biology and zoology.



The doctor, an enthusiastic hunter, smiles modestly as he poses beside the huge moose he brought down in Canada.

During the summer the family spent a lot of time together at their camp on Georgian Bay. There Dr. Novy instilled in his sons the same love of the outdoors he has always had. On tramps through the woods he pointed out various insects and different trees, helped the boys start collections of bugs and leaves. He gave them target practice. And remembering the fun he had had as a lad, he assisted them in building tree-houses. All the care and interest and love that are summed up in the words, "a devoted family man," were and are Dr. Novy's to an eminent degree.

The same interest continues with his nine grandchildren. He spends as much time with them as he possibly can, loves to bundle them in the car and take them on trips with him.

A trip with the doctor is an experience no one is likely to forget. Before he even dusts off a suitcase, he studies the history of the area through



Hanging in his den are many trophies of the chase. The little creature on the right side of the mantle is the mink which he shot when he was a youngster.

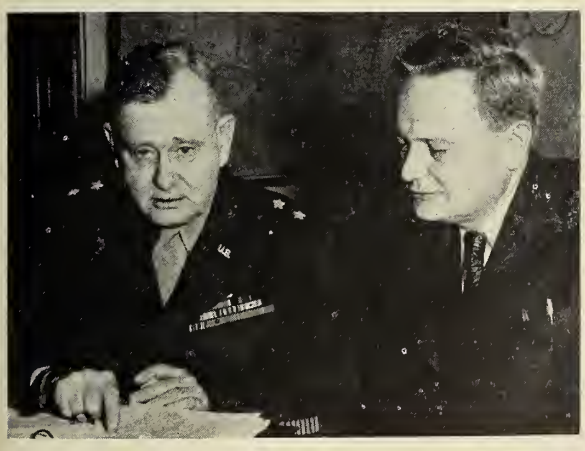
which he is going to travel. Along the way he stops to read every sign of historical interest, every commemorative tablet. His mind is as inquisitive as a youngster's.

Mrs. Novy recalls an early trip they took to Quebec. She pushed little Dorothy in a toddler over the cobblestones, desperately trying to keep up with the doctor, who had to go out and see the Plains of Abraham for himself and plot again the moves of Wolfe and Montcalm.

Even more than trips, though, Dr. Novy likes hunting, particularly out at his beautiful lodge on Cockburn Island, which he largely built himself. He delights in retiring into the wilds to match his cunning with that of his wary prey. Sometimes he goes alone, with only his gun for company. Sometimes he goes with a fair-sized party, usually either his family or other doctors. Then, while their beards grow, the woods echo to their shots



Dr. Otto O. Beck, then President of the Michigan State Medical Society, places the President's medal of office around the neck of Dr. Novy and proclaims him President for a Day of the Society. That was in 1952.



During the negotiations leading to the establishment of the Veterans Home Town Care Program, Dr. Novy had frequent meetings with General Paul Hawley, who was chief medical officer of the Veterans Administration before he joined the Blue Shield Commission.



Dr. Novy, acting in his office as Vice President of the Blue Shield Commission, congratulates William Marcum, the 26 millionth Blue Shield subscriber, while Dr. Louis Bauer, President of AMA, looks on. The scene was at the annual meeting of the House of Delegates of the AMA.

—and to their grunts and groans as they haul hundreds of pounds of moose or bear or deer over brush and rocks back to camp.

The doctor has many, many trophies of the chase. Perhaps the most impressive hangs in his den. It is the head of a gigantic moose which must have been a near relative of Paul Bunyan's blue ox, Babe.

Strangely missing from practically all the photographs of the hunting parties is Dr. Novy himself. The explanation, however, is quite simple: he is usually taking the pictures. For he is an enthusiastic photographer, has been for over fifty years. He received a small Brownie when he was a boy, and since then has taken, developed and printed thousands of pictures. He goes at photography as he goes at everything else, scientifically and enthusiastically, and the results justify his work.

How Bob Novy fits hobbies into a life as full as his, is a mystery to his associates. Although he is continually turning down offices, he estimates that those he holds take about three months a year away from his private practice. He never takes a job as merely an honor. He works hard at them all—and for none does he receive a cent of remuneration.

It is not surprising, then, that honors have come his way during his long and busy career. He was recently re-elected Vice President of the Blue Shield Commission. He is chairman of the MSMS Committee on Fee Schedules.

He was in 1952 elected President for a Day of the Michigan State Medical Society, in recognition of his many services for the cause of medicine. This title climaxed a long series of honors, which make impressive but hardly fascinating reading.

The titles that Dr. Novy probably appreciates most, though, are: Senior Physician at Harper Hospital, consultant and member of the staff of several other hospitals, and—most of all—simply M.D. For he is first and last a doctor, a healer of men's bodies.

MULTIPLE SCLEROSIS

(Continued from Page 637)

What of the prognosis? Unfortunately, the outlook for recovery in established cases is hopeless. The disease is progressive, usually slowly but inexorably persistent. No known treatment is helpful. However, in early amblyopia due to retrobulbar neuritis in a young person in the age period where multiple sclerosis is usually found, fever therapy is useful.

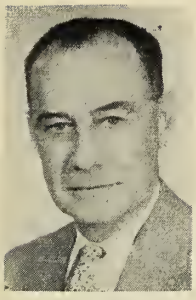
The beneficial effect in amblyopia is not often experienced with other symptoms in cases of multiple sclerosis, and the employment of fever therapy is not universally approved. On the theory that multiple sclerosis is a disease of the vascular system, the use of fever therapy for vasodilatation and increase in the opsonic index seems justified. Other neurological conditions in the category of demyelinating diseases are less prone to recovery and exacerbations, a difference that may explain the clinical response of multiple sclerosis to treatment although the plaque formation as it appears in the pathologic sections is not pathognomonic.

Multiple sclerosis is a recognizable clinical entity only when symptoms of multiple lesions are present. By then, all hope for improvement is lost. A presumptive diagnosis of multiple sclerosis is justified on isolated single episodes of ocular symptoms usually found in the established cases, and the symptoms may often be made to clear more rapidly and completely by early institution of a harmless remedy—mental and physical rest and fever therapy.

100 First Avenue Building

Michigan State Medical Society

The 89th Annual Session



William Bromme, M.D.
Detroit
Council Chairman



L. W. Hull, M.D.
Detroit
President



J. E. Livesay, M.D.
Flint
Speaker



L. Fernald Foster, M.D.
Bay City
Secretary

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, September 27-28-29-30-October 1, 1954. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

L. W. Hull, M.D.
President

William Bromme, M.D.
Council Chairman

J. E. Livesay, M.D.
Speaker

K. H. Johnson, M.D.
Vice Speaker

Attest:
L. Fernald Foster, M.D.
Secretary



K. H. Johnson, M.D.
Lansing
Vice Speaker

TWO-DAY SESSION OF HOUSE OF DELEGATES

September 27-28, 1954

The 1954 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 27, at 10:00 a.m. The business of the House of Delegates will be transacted in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit.

The House will meet also on Monday at 2:00 p.m. and at 8:00 p.m. and on Tuesday, September 28, at 9:30 a.m. and at 8:00 p.m.

The intervals between meetings of the House of Delegates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

SEATING OF DELEGATES

"Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved."—MSMS By-Laws, Chapter 8, Section 6.

OUTLINE OF 1954 ASSEMBLY AND SECTION SPEAKERS

89th Annual Session MSMS

Detroit, September 29-30, October 1, 1954

Time	Wednesday September 29, 1954	Thursday September 30, 1954	Friday October 1, 1954
A.M. 8:30-9:00	Registration Exhibits Open	Registration Exhibits Open	Registration Exhibits Open
9:00-9:30	*Surgery* MAX M. ZINNINGER, M.D. Cincinnati, Ohio	*General Practice* W. PAUL HOLBROOK, M.D. Tucson, Arizona	*Gastroenterology-Proctology* *(Beaumont Lecture)* WALTER A. FANSLER, M.D. *Minneapolis, Minnesota*
9:30-10:00	*Surgery* GEORGE CRILE, JR., M.D. Cleveland, Ohio	*Medicine* RICHARD B. CAPPS, M.D. Chicago, Illinois	*Dermatology* FRANCIS E. SENEAR, M.D. Chicago, Illinois
10:00-11:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
11:00-11:30	*Industrial Surgery* WILLIAM L. ESTES, JR., M.D. Bethlehem, Pennsylvania	*Otolaryngology* FRANCIS L. LEDERER, M.D. Chicago, Illinois	*Anesthesia* JAMES E. ECKENHOFF, M.D. *Philadelphia, Pennsylvania*
11:30 a.m. 12:00 noon	*Urology* FLETCHER H. COLBY, M.D. Boston, Massachusetts	*Nervous & Mental Diseases* ARTHUR P. NOYES, M.D. Norristown, Pennsylvania	*Dermatology* PAUL A. O'LEARY, M.D. Rochester, Minnesota
P.M. 12:00-1:00	DISCUSSION CONFERENCE	DISCUSSSION CONFERENCE	DISCUSSION CONFERENCE
2:00-2:30	*Pediatrics* CHARLES A. JANEWAY, M.D. Boston, Massachusetts	*Obstetrics* CARL P. HUBER, M.D. Indianapolis, Indiana	*Pathology* ISRAEL DAVIDSOHN, M.D. Chicago, Illinois
2:30-3:00	*Ophthalmology* JAMES H. ALLEN, M.D. New Orleans, Louisiana	*Gynecology* FREDERICK H. FALLS, M.D. Oak Park, Illinois	*Medicine* ROBERT L. LEVY, M.D. New York, New York
3:00-4:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	3:00-3:30 FINAL INTERMISSION TO VIEW EXHIBITS
4:00-4:30	*Obstetrics* ROY W. MOHLER, M.D. Philadelphia, Pennsylvania	*Pediatrics* L. EMMET HOLT, M.D. New York, New York	3:30-4:00 *Medicine* ISIDORE SNAPPER, M.D. Brooklyn, New York
4:30-5:00	*Public Health & Preventive Medicine* WILSON G. SMILLIE, M.D. New York, New York	*General Practice* JOSEPH H. PRATT, M.D. Rochester, Minnesota	4:00-4:30 *Medicine* CHRIS J. D. ZARAFONETIS, M.D. Philadelphia, Pennsylvania
5:00-6:00	FIVE SECTION MEETINGS *Public Health & Preventive Medicine* GORDON C. BROWN, SC.D. Ann Arbor, Michigan *Ophthalmology* JAMES H. ALLEN, M.D. New Orleans, Louisiana *Pediatrics* CHARLES A. JANEWAY, M.D. Boston, Massachusetts *Surgery* MAX M. ZINNINGER, M.D. Cincinnati, Ohio *Urology* FLETCHER H. COLBY, M.D. Boston, Massachusetts	FIVE SECTION MEETINGS *Gastroenterology-Proctology* WALTER A. FANSLER, M.D. Minneapolis, Minnesota *General Practice* JOSEPH H. PRATT, M.D. Rochester, Minnesota *Obstetrics-Gynecology* CARL P. HUBER, M.D. Indianapolis, Indiana *Otolaryngology* FRANCIS L. LEDERER, M.D. Chicago, Illinois *Nervous & Mental Diseases* ARTHUR P. NOYES, M.D. Norristown, Pennsylvania	4:30-5:00 *Surgery* TAGUE C. CHISHOLM, M.D. Minneapolis, Minnesota 5:00-6:00 FOUR SECTION MEETINGS *Dermatology-Syphilology* PAUL A. O'LEARY, M.D. Rochester, Minnesota *Medicine* ISIDORE SNAPPER, M.D. Brooklyn, New York *Pathology* ISRAEL DAVIDSOHN, M.D. Chicago, Illinois *Anesthesiology* JAMES E. ECKENHOFF, M.D. Philadelphia, Pennsylvania
	8:30-10:30 p.m. Officers' Night Biddle Lecture CHARLES W. MAYO, M.D. Rochester, Minnesota	10:00 p.m. to 1:00 a.m. State Society Night MSMS Entertainment	END OF ASSEMBLY

Michigan State Medical Society

The 89th Annual Session

SHERATON-CADILLAC HOTEL, DETROIT, MICHIGAN

September 27, 28, 29, 30-October 1, 1954

INFORMATION

- **DETROIT WILL BE HOST TO MSMS IN SEPTEMBER, 1954**
- **MSMS HOUSE OF DELEGATES** convenes Monday, September 27, at 10:00 a.m., Grand Ballroom, Sheraton-Cadillac Hotel. It will hold three meetings on Monday and two meetings on Tuesday, September 28.
- **THE PROGRAM OF THE ASSEMBLY** for the 89th Annual Session of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world which always grace the podium at annual conventions of the Michigan State Medical Society; they insure a valuable concentrated continuation course in all phases of medicine and surgery for the busy practitioners of Michigan, neighboring states and the Province of Ontario, on September 29-30-October 1, 1954.
- **REGISTRATION,** Tuesday afternoon through Friday afternoon, September 28-October 1, Sheraton-Cadillac Hotel. Advance registration—on Tuesday and early Wednesday morning—will save the doctors' time. Present your State Medical Society or Canadian Medical Association membership card to expedite registration.

  NO REGISTRATION FEE FOR STATE MEDICAL SOCIETY AND CMA MEMBERS.

  Doctors of Medicine, who are not members of their state medical society or of the Canadian Medical Association, will be accorded the privileges of the MSMS Annual Session upon payment of a $25.00 registration fee.
- **REGISTER AS SOON AS YOU ARRIVE. ADMISSION BY BADGE ONLY.**
- **ALL SUBJECTS** at the MSMS Annual Session are applicable to clinical medicine. They stress diagnosis and treatment, usable in every-day practice.
- **POSTGRADUATE CREDITS** given to every MSMS member who attends MSMS Annual Session.
- **SIX ASSEMBLIES** and one public meeting—fourteen Section Meetings—three Discussion Conferences, all on September 29-30-October 1.
- **A DISCUSSION CONFERENCE**—featuring the Guest Essayists of each day—will be held daily from 12:00 noon to 1:00 p.m. in the Grand Ballroom of the Sheraton-Cadillac Hotel. Audience participation invited.
- **SECTION MEETINGS** will follow the daily Assemblies—5:00 to 6:00 p.m.
- **PAPERS WILL BEGIN AND END ON TIME.** This scientific meeting will feature by-the-clock promptness and regularity.
- **NINETY-NINE TECHNICAL EXHIBITS** will contain much of interest and value. Intermissions to view the exhibits have been arranged.
- **WILLIAM S. REVENO, M.D., OF DETROIT** is General Chairman of the Detroit Committee on Arrangements for the 1954 MSMS Annual Session.
- **CABARET-STYLE DANCE AND ENTERTAINMENT,** with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom of the Sheraton-Cadillac Hotel on Thursday evening, September 30. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.
- **THE WOMAN'S AUXILIARY** to the Michigan State Medical Society will present an attractive social and business program at the Fort Shelby Hotel. The wife of every MSMS member is cordially invited to attend.
- **MEMBERS OF MICHIGAN MEDICAL SERVICE** will meet in annual session, Tuesday, September 28, at 2:00 p.m. This meeting will follow the annual MMS luncheon at 1:00 p.m., to be held in the new headquarters Building of Blue Shield, 441 East Jefferson Ave., Detroit.

SCIENTIFIC ASSEMBLY

Wednesday-Thursday-Friday, September 29-30-October 1, 1954

SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION

Michigan State Medical Society

The 89th Annual Meeting

SHERATON-CADILLAC HOTEL, DETROIT SEPTEMBER 27-28, 1954
HOUSE OF DELEGATES

ORDER OF BUSINESS*

MONDAY, SEPTEMBER 27

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

10:00 a.m.—First Meeting

1. Call to order by Speaker
2. Report of Committee on Credentials
3. Roll call
4. Appointment of Reference Committees:
   - (a) On Officers' Reports
   - (b) On Reports of The Council
   - (c) On Reports of Standing Committees
   - (d) On Reports of Special Committees
   - (e) On Constitution and By-Laws
   - (f) On Resolutions
   - (g) On Special Memberships
   - (h) On Rules and Order of Business
   - (i) On Legislation and Public Relations
   - (j) On Hygiene and Public Health
   - (k) On Medical Service and Prepayment Insurance
   - (l) On Miscellaneous Business
   - (m) On Executive Session
   - (n) On Emergency Medical Service
5. Speaker's Address—J. E. Livesay, M.D., Flint
6. President's Address—L. W. Hull, M.D., Detroit
7. President-Elect's Address—R. H. Baker, M.D., Pontiac
8. Annual and Supplemental Reports of The Council—William Bromme, M.D., Detroit, Chairman
9. Report of Delegates to American Medical Association—W. A. Hyland, M.D., Grand Rapids, Chairman
10. Brief of Annual Report of Woman's Auxiliary President—Mrs. W. S. Stinson, Bay City
11. Selection of Michigan's Foremost Family Physician
12. Resolutions**

MONDAY, SEPTEMBER 27

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

2:00 p.m.—Second Meeting

13 Supplementary Report of Committee on Credentials

14. Roll call
15. Reports of MSMS Standing Committees:
   - A. Committee on Postgraduate Medical Education
   - B. Preventive Medicine Committee:
     - (1) Committee on Rheumatic Fever Control
     - (2) Cancer Control Committee
     - (3) Maternal Health Committee
     - (4) Venereal Disease Control Committee
     - (5) Tuberculosis Control Committee
     - (6) Industrial Health Committee
     - (7) Mental Hygiene Committee
     - (8) Child Welfare Committee:
       - (a) Subcommittee on Hearing Defects
       - (b) Subcommittee on School Health Problems
       - (c) Subcommittee of Ophthalmologists
     - (9) Iodized Salt Committee
     - (10) Geriatrics Committee
   - C. Public Relations Committee (and Subcommittees)
   - D. Ethics Committee
   - E. Legislative Committee
16. Reports of Special Committees
   - A. Beaumont Memorial Committee
   - B. Scientific Radio Committee
   - C. Advisory Committee to Woman's Auxiliary
   - D. Advisory Committee to Michigan State Medical Assistants Society (page —)
   - E. Michigan Cancer Co-ordinating Committee

Reports of the Committees of The Council, including Committee on Scientific Work, are included in Annual Report of The Council

MONDAY, SEPTEMBER 27

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

8:00 p.m.—Third Meeting

17. Supplementary Report of Committee on Credentials
18. Roll call
19. Unfinished business
20. New business
21. Reports of Reference Committees:
   - (a) On Officers' Reports
   - (b) On Reports of The Council
   - (c) On Reports of Standing Committees
   - (d) On Reports of Special Committees.
   - (e) On Resolutions
   - (f) On Resolutions
   - (g) On Special Memberships
   - (h) On Rules and Order of Business
   - (i) On Legislation and Public Relations
   - (j) On Hygiene and Public Health
   - (k) On Medical Service and Prepayment Insurance
   - (l) On Miscellaneous Business
   - (m) On Executive Session
   - (n) On Emergency Medical Service

*See the Constitution, Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

**All resolutions, special reports, and new business shall be presented in writing in triplicate (By-Laws, Chapter 8, Section 10-m).

TUESDAY, SEPTEMBER 28

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

9:30 a.m.—Fourth Meeting

22. **Supplementary Report of Committee on Credentials**
23. **Roll call**
24. **Unfinished business**
25. **New business**
26. **Supplementary Reports of Reference Committees**

TUESDAY, SEPTEMBER 28

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

8:00 p.m.—Fifth Meeting

27. **Supplementary Report of Committee on Credentials**
28. **Roll call**
29. **Unfinished business**
30. **Supplemental Report of The Council**
31. **Supplementary Reports of Reference Committees**
32. **Elections:**
    (a) Councilors:
    14th District—B. M. Harris, M.D., Ypsilanti—Incumbent
    18th District—Wm. Bromme, M.D., Detroit—Incumbent
    (b) Delegates to American Medical Association:
    W. D. Barrett, M.D., Detroit—Incumbent
    W. H. Huron, M.D., Iron Mountain—Incumbent
    R. L. Novy, M.D., Detroit—Incumbent
    (c) Alternate Delegates to American Medical Association
    C. I. Owen, M.D., Detroit—Incumbent
    G. W. Slagle, M.D., Battle Creek—Incumbent
    E. D. Spalding, M.D.—Deceased
    (d) President-Elect
    (e) Speaker of the House of Delegates
    (f) Vice-Speaker of the House of Delegates
33. **Adjournment**

ADVANCE REGISTRATION OF DELEGATES

Sunday, September 26, 1954

8:00 to 10:00 p.m.

Grand Ballroom Foyer (4th floor)

Sheraton-Cadillac Hotel, Detroit

REGISTRATION

also on

Monday, September 27, 1954

8:00 a.m.

Grand Ballroom Foyer

ANNUAL SESSION APPOINTMENTS

- *General Chairman of the 1954 MSMS Annual Session*
  Wm. S. Reveno, M.D., Detroit
- *House of Delegates Press Relations Committee*
  J. E. Livesay, M.D., Flint, *Chairman*
  L. Fernald Foster, M.D., Bay City
  K. H. Johnson, M.D., Lansing
  R. A. Johnson, M.D., Detroit
  C. L. Weston, M.D., Owosso
- *Scientific Assembly Press Relations Committee*
  R. A. Johnson, M.D., Detroit, *Chairman*
  H. F. Dibble, M.D., Detroit
  J. G. Molner, M.D., Detroit
  E. F. Sladek, M.D., Traverse City

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

89th Annual Session

Detroit, September 27-October 1, 1954

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to the Committee on Hotels for MSMS Convention, Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

— — — — — — — — — — — — — — — — — — —

Committee on Hotels,
Michigan State Medical Society Annual Session
c/o Sheraton-Cadillac Hotel
Detroit, Michigan

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving September.....hour.....A.M.....P.M.

Leaving .....hour.....A.M.....P.M.

Hotel of First Choice: .....

Second Choice: .....

Names and addresses of all applicants including persons making reservation:

Name	Address	City	State
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Date..... Signature.....

Address..... City.....

MSMS HOUSE OF DELEGATES, 1954

Delegates and Alternates

(Names of Alternates appear in Italics)

OFFICERS

J. E. Livesay, M.D., 621 Mott Foundation Bldg., Flint, Speaker
K. H. Johnson, M.D., 1116 Olds Tower, Lansing, Vice-Speaker
L. Fernald Foster, M.D., 919 Washington, Bay City, Secretary
R. J. Hubbell, M.D., 252 E. Lovell, Kalamazoo, Immediate Past President

ALLEGAN

L. F. Brown, M.D., Otsego
E. B. Johnson, M.D., Allegan

ALPENA-ALCONA-PRESQUE ISLE

E. S. Parmenter, M.D., 140 E. Washington, Alpena
J. E. Spens, M.D., Professional Bldg., Alpena

BARRY

A. B. Gwinn, M.D., Hastings
H. S. Wedel, M.D., Hastings

BAY-ARENAC-IOSCO

O. J. Johnson, M.D., N. Walnut, Bay City
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W. G. Gamble, Jr., M.D., 2010 Fifth Ave., Bay City

BERRIEN

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F. A. Rice, M.D., 324 N. Fourth Street, Niles

BRANCH

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R. J. Fraser, M.D., 22 W. Pearl St., Coldwater

CALHOUN

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S. T. Lowe, M.D., 1009 Security Bank Bldg., Battle Creek
L. R. Keagle, M.D., 196 North Avenue, Battle Creek

CASS

S. L. Loupee, M.D., Dowagiac
U. M. Adams, M.D., Marcellus

CHIPPEWA-MACKINAC

W. F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie
E. S. Rhind, M.D., 300 Court St., Sault Ste. Marie

CLINTON

F. W. Smith, M.D., St. Johns
W. B. McWilliams, M.D. Maple Rapids

DELTA-SCHOOLCRAFT

J. H. Fyvie, M.D., 202 S. Cedar, Manistique
H. Q. Groos, M.D., 1015 S. First, Escanaba

DICKINSON-IRON

W. H. Huron, M.D., 107 East "A" Street, Iron Mountain
H. D. McEachran, M.D., 401 East "C" Street, Iron Mountain

EATON

P. H. Engle, M.D., Olivet
B. P. Brown, M.D., Charlotte

GENESEE

C. W. Colwell, M.D., 706 Citizens Bank Bldg., Flint
L. M. Bogart, M.D., 1008 Genesee Bank Bldg., Flint
R. M. Bradley, M.D., 420 Genesee Bank Bldg., Flint
F. D. Johnson, M.D., 312 Paterson Bldg., Flint
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GOGEBIC

D. C. Eisele, M.D., 109 E. Aurora, Ironwood
H. A. Pinkerton, M.D., Newport Hospital, Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE

D. G. Pike, M.D., 876 E. Front St., Traverse City
C. E. Lemen, M.D., 216 E. Front St., Traverse City

GRATIOT-ISABELLA-CLARE

M. G. Becker, M.D., Edmore
E. S. Oldham, M.D., Breckenridge

HILLSDALE

A. W. Strom, M.D., 32 S. Broad St., Hillsdale
L. W. Day, M.D., 112 E. Chicago, Jonesville

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IONIA-MONTCALM

W. L. Bird, M.D., Greenville
H. M. Fox, M.D., Portland

JACKSON

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J. C. Slaybaugh, M.D., Ludington

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D. N. Kilmer, M.D., 102½ W. Upton, Reed City

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L. L. Savage, M.D., Caro

VAN BUREN

W. R. Young, M.D., Lawrence
T. J. Dillon, M.D., Paw Paw

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R. F. Fenton, M.D., 15125 Grand River Ave., Detroit
E. A. Osius, M.D., 901 David Whitney Bldg., Detroit
Harold Henderson, M.D., 852 Fisher Bldg., Detroit
G. C. Penberthy, M.D., 1515 David Whitney Bldg., Detroit
W. S. Reveno, M.D., 958 Fisher Bldg., Detroit
D. I. Sugar, M.D., 13120 Broadstreet, Detroit
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RECORD NUMBER OF PHYSICIANS LICENSED TO PRACTICE MEDICINE

An all-time record number of physicians—218,522—were licensed to practice medicine in the United States at the close of 1953, according to the fifty-second annual report on medical licensure of the American Medical Association's Council on Medical Education and Hospitals.

Of this total, 156,333 were engaged in private practice, 6,677 were engaged in full-time research and teaching and were physicians employed by insurance companies, industries, and health departments, 29,161 were interns and residents in hospitals and those engaged in hospital administration, 9,311 were retired or not in practice, and 17,040 were in government service.

The data presented in the report showed that last year 7,276 physicians received their first license to practice medicine. In the same period there were approximately 3,421 deaths of physicians reported, so that there was a net gain of 3,855 in the physician population in the United States and its territories and outlying possessions.

HOUSE OF DELEGATES, 1954

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

WHERE WE STAND ON BIRTHS, INFANT DEATHS AND DEATHS

Provisional figures indicate that Michigan's 1953 birth rate, infant death rate and general death rate compare favorably with those of other states and of the United States as a whole.

Michigan registered a record number of births in 1953, a total of 181,519. The birth rate was 26.6, slightly higher than the 24.8 for the country as a whole. Michigan stood a little higher than midway among the states, with the District of Columbia recording the highest rate, 37.1, and New Jersey the lowest, 20.8. Fifteen states and the District of Columbia had rates higher than Michigan.

Our infant death rate for 1953 was 25.8. This gave us a favorable position among the states, apparently near mid-position but only 4.9 from the lowest rate. Nineteen states and the District of Columbia had lower rates. The United States rate was 28.0. Iowa had the lowest rate among the states, 20.9 and Arizona had the highest, 48.0.

Michigan's death rate was 9.0 in 1953, exactly the same as Arizona, Louisiana, and Oregon. This was slightly lower than the United States rate of 9.6. Fourteen states had lower death rates, with Utah registering 7.2. New Hampshire had the highest death rate among the states, 11.9.

LEGISLATION OF CONCERN TO PUBLIC HEALTH

Among the bills passed by the Legislature which had to do with public health were several dealing with tuberculosis.

The bill on handling of recalcitrants did not authorize the control that authorities consider desirable but it is considered a step forward.

The grant for expanding the tuberculosis control program was just a little under $127,000.

The regular county tuberculosis subsidy was raised from $3.50 to $4.00 a day.

The total state tuberculosis subsidy was set at $7,360,000.

The bill recognizing drug addiction as a disease rather than a criminal act gives state and local health departments what amounts to an expediting function in bringing possible addicts to the attention of the circuit courts for commitment for treatment.

The state health commissioner was given the power to establish standards of maintenance and operation for general hospitals in order to conform to federal regulations for social aid benefit payments.

The formula for distributing state aid to local health departments was clarified and simplified. After this year, there will be a basic grant not to exceed $5,000 for each county supporting an approved health department. If the annual appropriation makes any money available beyond the basic grant, up to 15 per cent may be used for training in local health work.

SUMMER ASSISTANCE IN SANITATION TO BE GIVEN BY DEPARTMENT

The department will put four additional sanitarians in the field for the summer months, to work on resort sanitation in counties that do not have full-time health departments and in counties whose health departments are without sanitarians.

AID IN FLY AND MOSQUITO CONTROL

In preparation for the vacation season, two members of the staff of the Division of Engineering, accompanied by a consultant from the Communicable Disease Center at Atlanta, Georgia, visited Mackinac Island to consult with Park Commission officials on present methods of fly and mosquito control and any possible improvements. Spraying with DDT is now routine on streets and along roadsides, and a larvacide is used on the Island dumping area.

Camp Grayling was also visited by the engineers to review the Camp's system of fly and insect control and to try to devise more effective spraying methods.

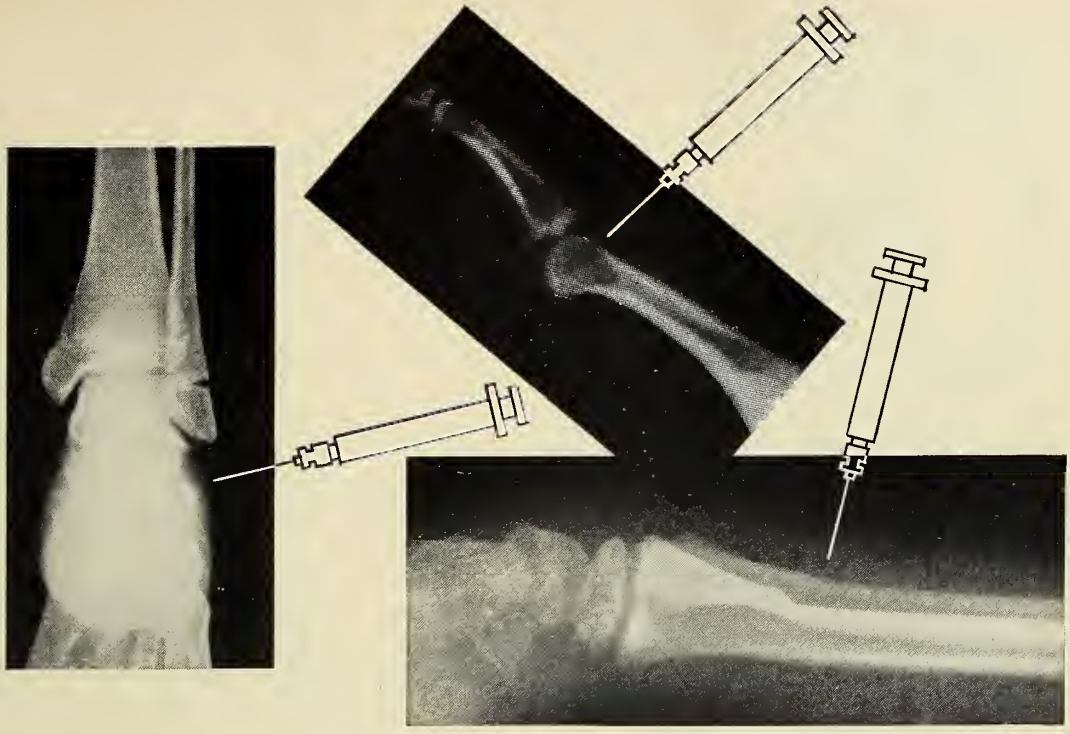
THE NEWER LOOK IN GARBAGE AND REFUSE DISPOSAL

Two demonstrations of the sanitary landfill method of disposing of municipal garbage and refuse were staged in May, one at Traverse City for city officials in the northern part of the lower peninsula, and one in Escanaba for interested communities of the Upper Peninsula.

Many Michigan cities are facing an urgent need to find a satisfactory way to dispose of garbage and refuse. This is due in some areas to rapid growth but also to a growing public distaste for dumps and for makeshift systems of garbage disposal. The new law requiring the cooking of garbage fed to hogs has helped to discourage that method of solving the problem.

The sanitary landfill method has a number of advantages. It permits disposal close to the city, eliminating costly hauling. It does away with the insect and rat nuisance that make dumps a neighborhood menace. Moreover, it affords an inexpensive way of reclaiming waste land. A number of Michigan communities utilizing this method have acres of reclaimed land made into parks and used for other municipal improvements.

Prostate cancer is so insidious in its onset that 95 per cent of patients are only diagnosed after the disease has extended too far to be cured by operation.



Use of Alidase® in Closed Wounds: Contusions, Sprains, Dislocations, Simple Fractures

In traumatic surgery[1] where "definitive treatment . . . is often delayed while the surgeon waits for nature to dispose of hematoma and oedema" Alidase is an efficient means[1, 2] of accelerating dispersion of accumulated fluids.

Swenson[2] has described his highly successful results with Alidase in various types of closed wounds. He summarized them as follows:

To remove local fluid accumulations in contusions or bruises, "The usual dose, 500 viscosity units Alidase® mixed in a small amount of normal saline, is injected into the localized fluid. Mixing the hyaluronidase in 1 per cent procaine solution will also produce local vasodilatation, relief of local pain and more rapid absorption of the fluid mass. This method can also be applied to traumatized bursae or synovial spaces which do not respond to repeated aspirations."

The point of maximal pain is infiltrated with 10 cc. of a 1 per cent procaine solution to which 500 viscosity units of Alidase have been added. With this simple technic, a high percentage of successful results has been obtained.

Alidase may be used to advantage to produce more rapidly a short-acting, complete block anesthesia and to facilitate reduction in subluxation or complete dislocations of the interphalangeal joints. When anesthesia is required for fracture reduction, local block anesthesia can be simplified by adding Alidase to the anesthetic solution. Alidase also tends to decrease local edema and hematoma formation.

Fluids administered with Alidase are rapidly absorbed from subcutaneous tissue. The simplicity of hypodermoclysis avoids the cumbersome arm board, permits convenient administration with little or no pain or swelling, is vein-sparing and saves nursing time in such conditions as burns, postoperative states, toxemias and parenteral alimentation.

Alidase (brand of hyaluronidase) is supplied in serum-type ampuls of 500 viscosity units. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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1. MacAusland, W. R., Jr.; Gartland, J. J., and Hallock, H.: The Use of Hyaluronidase in Orthopaedic Surgery, J. Bone & Joint Surg. *35-A*:604 (July) 1953.
2. Swenson, S. A., Jr.: Minor Surgical Aspects of Closed Wounds, Am. J. Surg. *87*:384 (March) 1954.



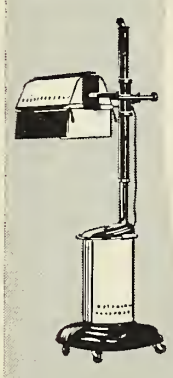
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Communications

April 13, 1954

Michigan State Medical Journal
Lansing, Michigan

Dear Sirs:

Perhaps this letter of mine and the answer from Mr. J. W. Holloway, Jr., director of the AMA, might be worth publishing.

Many of us are still in the dark as to this phase of the income tax and it is no fun to have a deduction disallowed after five years or so with a 6 per cent interest rate.

Yours truly,
HARRY G. CLARK, M.D.

HGC/cs

April 3, 1954

American Medical Association
535 North Dearborn Street
Chicago 10, Illinois

Dear Sirs:

There are many glaring inconsistencies and inequities in the income tax, and one of the major ones is the ruling which says that cost of postgraduate study is not deductible. By a recent court ruling, the cost of a refresher course is now deductible, but a course which adds to new skills and abilities and presumably new opportunities for profit, is not deductible.

On page 77 of "Medical Economics," March, 1954, is mentioned a case where a surgical course costing $4,000 was not deductible. Supposing that this physician died a week after completing his course. His income tax would not benefit, nor would his estate tax, and yet the value to him of his professional outlay of $4,000 was wasted and lost.

The major part of a physician's assets are in his head. These assets disappear at death. A businessman who has built a business can leave it to his heirs. Even the good will that he has earned is a tangible, financial asset which can be turned into cash. A doctor's practice, ability and reputation is a total loss at the moment of death or even on retirement. Either postgraduate costs should be deductible from income tax, or the whole cost of medical education should be deductible from a doctor's estate at death.

Since very few physicians reach the upper bracket of estate taxation, very seldom is this facet of the tax problem discussed. The tendency for the government to make contradictory rulings in its own favor can only be combatted by publicity and organized pressure. Income tax people say that their rulings are based frequently on the policy of the public good. What more good can the public obtain than to encourage physicians to improve their abilities? Can the AMA do anything to correct an "heads I win, tails you lose" regulation.

Yours truly,
HARRY G. CLARK, M.D.

HGC/cs

April 12, 1954

Dr. Harry G. Clark
14600 Greenfield Road
Detroit 27, Michigan

Dear Doctor Clark:

There has been referred to me, your letter of April 3, concerning the deductibility for federal income taxes of expenses incurred by a physician in pursuing postgraduate study.

(Continued on Page 680)

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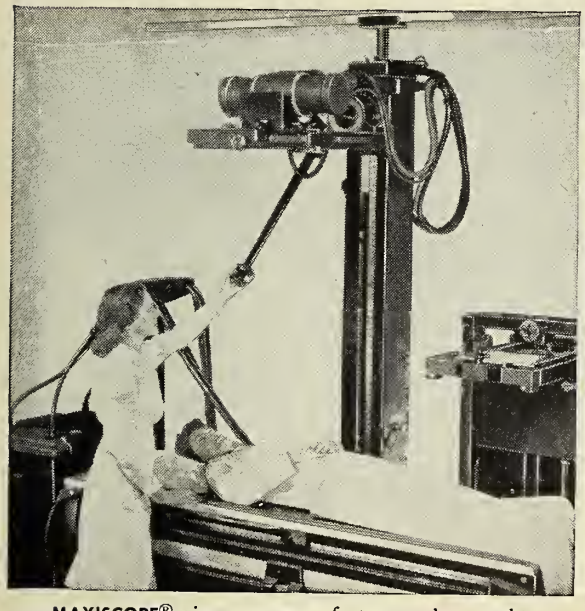
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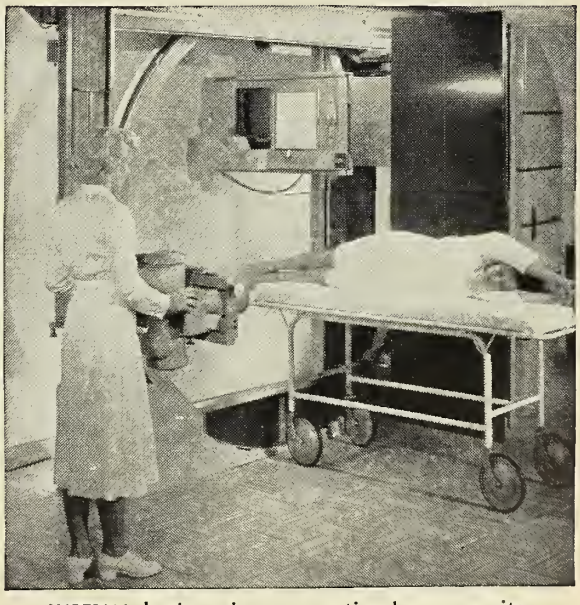
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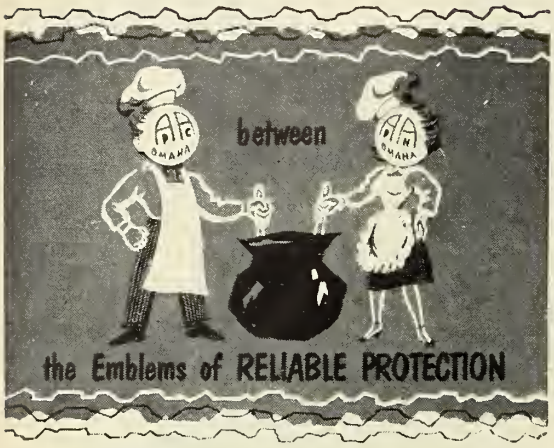


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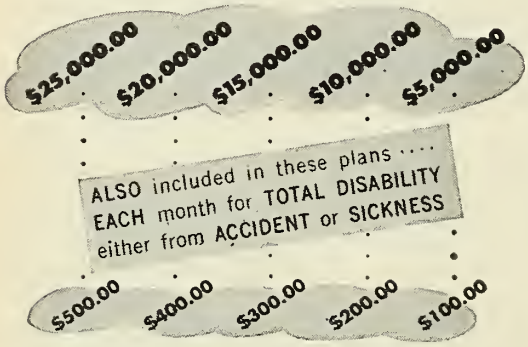
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(Continued from Page 678)

The statement you saw in the March, 1954, issue of Medical Economics lacks clarity in my judgment. That statement would seem to indicate that under no circumstances may a physician who takes a postgraduate course in surgery deduct the expenses from his income to arrive at his taxable income. That is not the case. It is true that under the ruling in the Coughlin case only those expenses may be deducted when incurred in the pursuit of post-graduate instruction that tends to keep the taxpayer apprised of developments in his particular field. In that case the taxpayer was a lawyer who took a postgraduate course in taxation not only to refresh the information he had previously obtained but also to obtain additional information as to newer developments in the tax field. The distinction, as I view it, is that a general practitioner cannot pursue a course in a specialty, such as surgery, for the purpose of qualifying himself as a specialist in that field and deduct the cost thereof. If a specialist in surgery, however, wishes to pursue his specialty further in order to learn of newer developments and new techniques, I know of no reason why under the Coughlin case he cannot deduct the expenses incurred in taking the additional study.

The Bureau of Internal Revenue will shortly issue a general ruling to cover the new law set forth in the Coughlin case and will make it applicable not only to lawyers, school teachers, accountants, dentists and others but also especially to physicians. I was in Washington on Tuesday and Wednesday of last week to confer with the lawyer in the Bureau who is handling the matter. With me were our Washington tax counsel and Dr. Douglas Vollen who has been for several years in charge of a post-graduate study initiated by the Council on Medical Education and Hospitals. We attempted to advise the Bureau lawyer of the position of medicine and offered a number of suggestions to him in the hope that whatever ruling is published may not be subject to varying interpretations by the several Directors of Internal Revenue in the States.

I anticipate that the new ruling may be issued within a month or so and due publicity to it will be given in The Journal.

Sincerely yours,
J. W. Holloway, Jr.

JWH/btm

Wilfrid Haughey, M.D., Editor
Journal of the Michigan State Medical Society
610 Post Bldg.
Battle Creek, Michigan

Dear Doctor Haughey:

I have been directed by the Marquette-Alger County Medical Society to point out to you an error in your February edition of The Journal.

On page 204, under "Recent M.D. Locations in Michigan," you list "E. F. Brasier, M.D., Mayville (from Munising)." This man is not an M.D., but rather is an osteopathic physician. We wish that you would make this correction in a future issue. Thank you.

Yours truly,
J. W. Lyons, M.D.
Secretary-Treasurer

Herryman Maurer says: It isn't just because some doctors are accused of being fast-money men. It is because most doctors practice a new and better brand of medicine that leaves many people cold, while it makes them well.—*Fortune,* February, 1954.

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Thomas Francis, Jr., M.D., Ann Arbor, delivered a paper entitled "The Distribution of Poliomyelitis in the Community" on April 21, 1954, before the Annual Meeting of the Tennessee State Medical Association in Nashville.

William S. Reveno, M.D., and **Herbert Rosenbaum, M.D.**, Detroit, are the authors of an article entitled "Long-Term Antithyroid Therapy, Report of a Case," published in the *Journal of the American Medical Association,* April 10, 1954.

A. D. Ruedemann, M.D.; N. Craig Roberts, M.D., and **A. R. Seligson, M.D.**, Detroit, are authors of an article entitled "Luxation of the Globes," published in the *American Journal of Ophthalmology,* March, 1954.

Parker Heath, M.D., Boston, formerly of Detroit, is author of an article "A Clinical Pathological Conference" published in *American Journal of Ophthalmology,* March, 1954.

Henry A. Luce, M.D., Detroit, is the author of an article entitled "Psychiatry for the General Practitioner," published in the *Journal of the Michigan State Medical Society,* November, 1952, and a condensation of which is published in *American Practitioner and Digest of Treatment,* April, 1954.

K. W. Cochran, G. C. Brown, and **Thomas Francis, Jr. M.D.**, Ann Arbor, are the authors of an article entitled "Antiviral Action of a Mold Filtrate on Experimental Poliomyelitis in Cynomolgus Monkeys" published in *Proc. Soc. Exper. Biol. & Med.,* January, 1954.

Thomas Francis, Jr., M.D., G. C. Brown, and **A. Kandel,** Ann Arbor, are the authors of an article entitled "Effect of Fluoroacetate Upon Poliomyelitis in Monkeys," published in *Proc. Soc. Exper. Biol. & Med.,* January, 1954.

William R. Eyler, M.D., Detroit, is the author of an article entitled "Some Roentgen Manifestations of Acute Abdominal Disease," published in *Henry Ford Hospital Medical Bulletin,* March, 1954.

John R. Caldwell, M.D., Detroit, is the author of an article entitled "Polyostotic Fibrous Dysplasia (A Case Report)," published in *Henry Ford Hospital Medical Bulletin,* March, 1954.

Eugene J. Alexander, M.D., Detroit, is the author of an article entitled "Misuse of Words," published in the *Henry Ford Hospital Medical Bulletin,* March, 1954.

Raymond C. Mellinger, M.D., and **Richmond W. Smith, Jr., M.D.**, Detroit, are the authors of an article entitled "Hyperthyroidism, Two Cases Demonstrating Its Inception During Cortisone and Thyroid Therapy," published in the *Henry Ford Hospital Medical Bulletin,* March, 1954.

John Lyford, III, M.D., Detroit, is the author of an article entitled "An Appliance for the Non-Operative Relief of Paralytic Foot Drop," published in the *Henry Ford Hospital Medical Bulletin,* March, 1954.

Richard E. Shipley, M.D., Detroit, is the author of an article entitled "Certain Fundamentals of Pressure Recording," published in the *Henry Ford Hospital Medical Bulletin,* March, 1954.

John H. Burger, M.D., K. Charles Wright, M.D., and **Joseph H. Shaffer, M.D.**, are authors of an article entitled "Serious Hypotension Following Seafood Ingestion," published in the *Henry Ford Hospital Medical Bulletin,* March, 1954.

Vlado A. Getting, M.D., Dr. P.H., Ann Arbor, is the author of an article entitled "The Family Physician and the Public Health Department," published in the *Journal of the American Medical Association,* September, 1953, and condensed in the *American Practitioner and Digest of Treatment,* March, 1954.

Donald S. Bolstad, M.D., Detroit, is the author of an article entitled "Primary Amyloidosis of the Lower Respiratory Tract" published in *Annals of Oto., Rhin. and Laryng.,* March, 1954.

Morton S. Hilbert, C.E., M.P.H., F.A.P.H.A., Eloise, is the author of an article entitled "Development of Sanitary Districts for Water, Sewage, Drainage, and Refuse Control," published in *The American Journal of Public Health,* April, 1954.

Fred Wertheimer, D.D.S., M.P.H., Lansing, is the author of an article entitled "Michigan's Summer Topical Fluoride Program," published in *The American Journal of Public Health,* April, 1954.

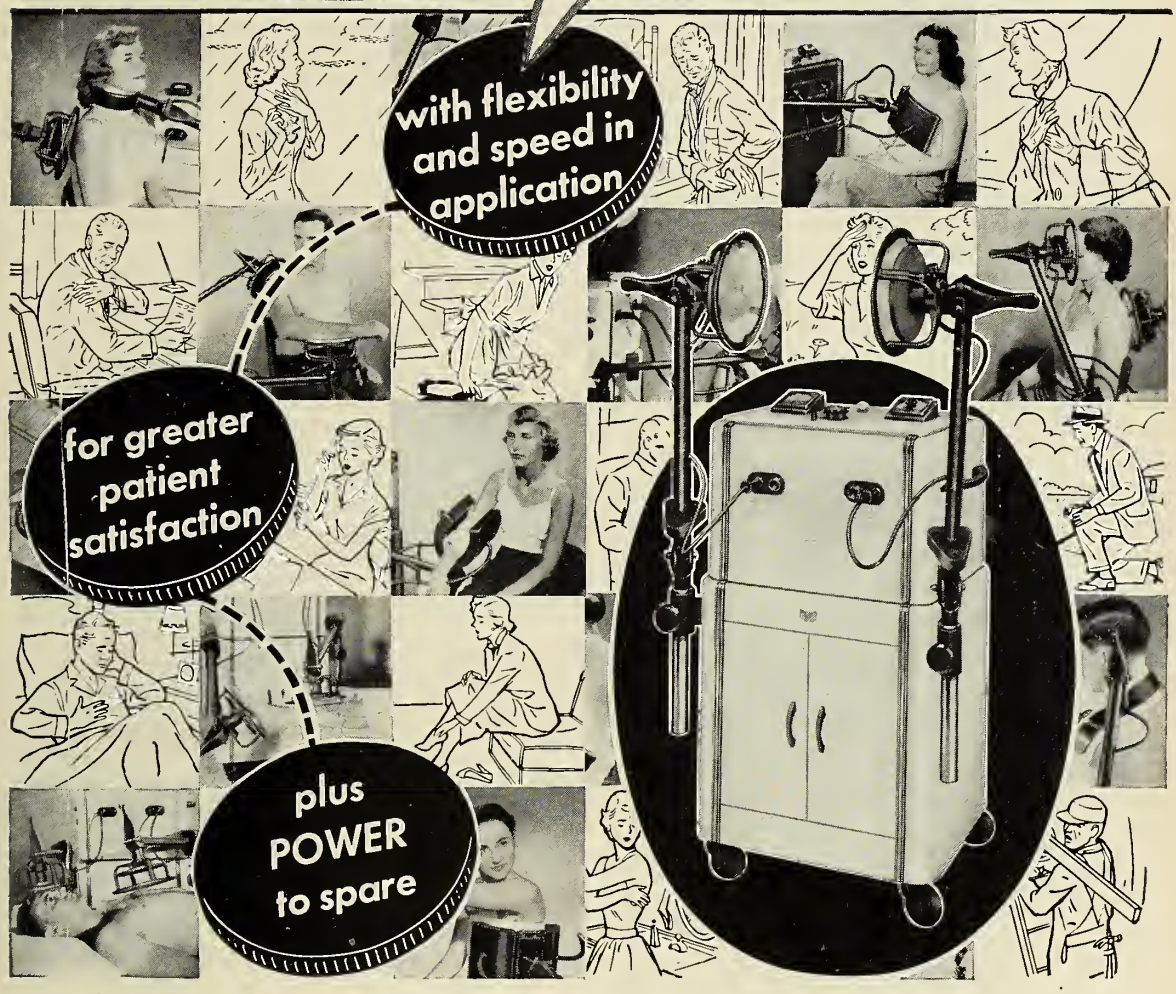
Meyer O. Cantor, M.D., Detroit, is the author of an original article which appeared in *The American Journal of Surgery,* January, 1954, entitled "Simplified Intestinal Decompression Sound."

* * *

Detroit Dermatological Society Elects Officers. At the annual business meeting of the Detroit Dermatological

(Continued on Page 686)

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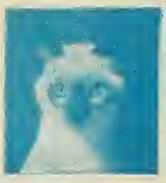
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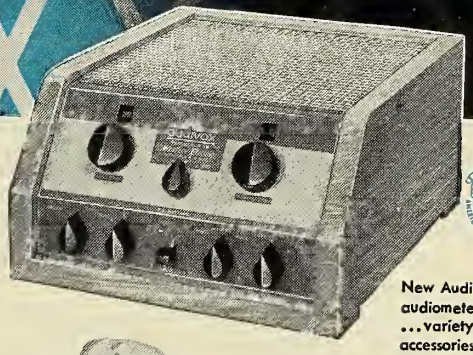
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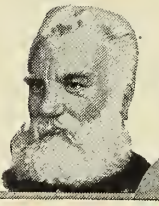
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(Continued from Page 682)

Society on April 28, 1954, the following officers were elected: President, Charles J. Courville, M.D., Detroit; president-elect, Loren W. Shaffer, M.D., Detroit; secretary-treasurer, Coleman Mopper, M.D., Detroit; recorder, Roy C. Holmes, M.D., Muskegon. The Detroit Dermatological Society holds monthly meetings on the second Wednesday of each month from October through May.

* * *

Appointment of Thomas H. Weller, M.D., thirty-eight-year-old virologist and parasitologist and a leading investigator in the field of poliomyelitis, as the Richard Pearson Strong Professor of Tropical Public Health at the Harvard School of Public Health in Boston, was announced April 20, 1954.

Dr. Weller, native of Ann Arbor, Michigan, and a graduate of the University of Michigan and the Harvard Medical School, is best known professionally for his collaborative work with John F. Enders, M.D., and Frederick C. Robbins, M.D., in the development of the tissue culture method as applied to the growth of viruses, including the poliomyelitis virus. This work was the basis for techniques now being employed in certain laboratories for diagnosing poliomyelitis and led to the method now being used in the production of the poliomyelitis vaccine currently undergoing field trial throughout the United States.

Selection of the first holder of the first endowed professorial chair at the School was made known at the Second Conference of the Industrial Council for Tropical Health, sponsored by the Harvard School of Public Health. One of the conference features was a paper by Dr. Weller on "Recent Developments in Poliomyelitis, with Special Reference to the Rising Incidence in U. S. Personnel after Transfer to the Tropics."

* * *

The spring meeting of the Michigan Chapter of the American College of Chest Physicians, was held on Wednesday, April 14, at the Chest and General Hospital. Arthur J. Varwald, M.D., former head of the Trudeau Foundation Laboratories, and now Professor of Industrial Hygiene, at Wayne University Medical School, gave a brief outline of his studies on "Pulmonary Functions." This study attempts to correlate the relation of air pollution to pulmonary disease and also to give a more precise understanding of the clinical findings in Pulmonary Radiology and Pathology.

The following officers were elected for the year 1954: President, Forest Dodrill, M.D.; vice president, W. Harold Barron, M.D.; secretary-treasurer, Kenneth Wood, M.D.

* * *

The Pan American Interim Congress of Ophthalmology will be held in Sao Paulo, Brazil, June 11-17, 1954. The main topics for discussion are: "Recent Advances in Ophthalmological Therapeutics" and "Prevention of Blindness."

* * *

Edgar E. Poos, M.D., of Detroit, read a paper before the Aero Medical Association meeting March 29, at

(Continued on Page 688)

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(Continued from Page 686)

Washington, D. C., entitled "Functional Disturbance of the Ear, Nose and Throat as they apply to Airmen." Dr. Poos was elected to the Executive Council of the Airline Medical Examiners Association at this meeting.

* * *

University Presents Telecourses. The University of Michigan Television Office, Ann Arbor, has scheduled a program "Your Health and Modern Medicine," which will include a discussion of diseases related to allergies, the heart, sinus, digestive disorders, and arthritis. Guest lecturers who will appear on the series are: Drs. John M. Sheldon, Albert C. Furstenberg, H. Marvin Pollard, Franklin D. Johnston, and William D. Robinson, Ann Arbor. Dr. Harry A. Rowsley, Ann Arbor, will serve as telecourse co-ordinator. The program originates in the studios of WWJ-TV, *The Detroit News,* and is carried also by WJIM-TV, Lansing, and WKZO-TV, Kalamazoo.

* * *

Army Hospital Internships Awarded. Final selection of 150 senior medical students for internships in Army hospitals was revealed April 5 by Major General Silas B. Hays, Acting Surgeon General of the Army. Four of these awards are to Michigan men: August R. Bauer, Jr., 15400 Glastonbury Rd., Detroit (University of Michigan), Walter Reed; Patrick H. Daoust, 1099 Van Dyke, Detroit (Wayne University), Walter Reed; Andrew J. Hopkins, 2449 Blaine, Detroit (Wayne University), Tripler; and John W. MacKenzie, 1350 E. Jefferson Detroit (Wayne University), Tripler.

* * *

Atomic Energy Commission Awards Contracts. Contract renewals of unclassified physical research have been made to the University of Michigan on two projects: (1) Nuclear Research with 300 Mev Synchrotron, H. R. Crane, Investigator; and (2) Nuclear Chemical Research, W. W. Meinke, Investigator.

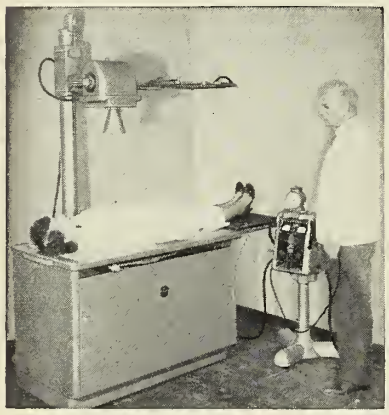
Announcement was made April 14, 1954.

* * *

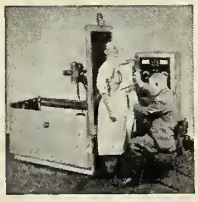
The National Gastroenterological Association announces that its sixth annual course in Postgraduate Gastroenterology will be given at the Shoreham Hotel in Washington, D. C., on October 28, 29, 30, 1954. The course will again be under the direction of Owen H. Wangensteen, M.D., Professor of Surgery of University of Minnesota Medical School, who will serve as surgical co-ordinator, and I. Snapper, M.D., Director of Medical Education, Beth-el Hospital, Brooklyn, N. Y., who will serve as medical co-ordinator. Drs. Wangensteen and Snapper will be assisted by a distinguished faculty selected from the medical schools and Walter Reed Army Hospital, whose presentations will cover all phases of gastrointestinal diseases and problems. The entire session on Friday, October 30, 1954, will be given at the Walter

(Continued on Page 690)

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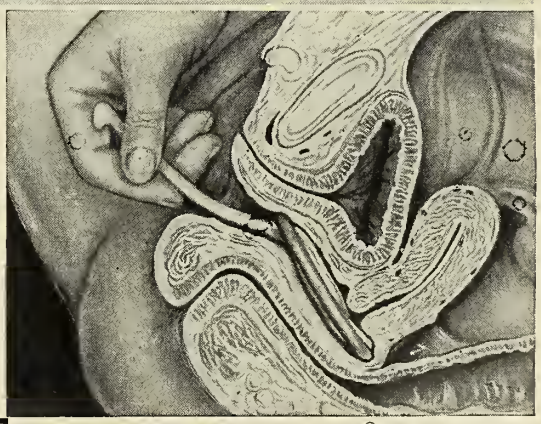
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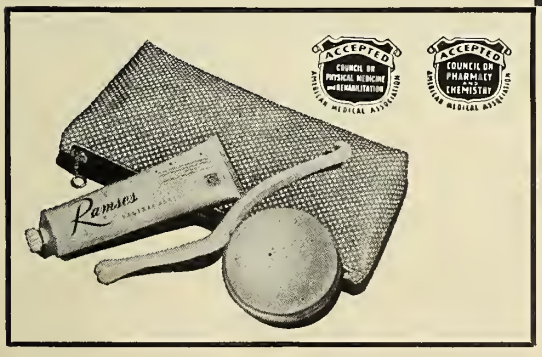


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(Continued from Page 688)

Reed Army Hospital. For further information and enrollment write to the National Gastroenterological Association, Department GSJ, 33 West 60th Street, New York 23, N. Y.

* * *

Representatives of five different groups—the American Hospital Association, the American Dental Association, the American Public Health Association, the American Public Welfare Association, and the American Medical Association—held their first meeting in Chicago recently for the purpose of exploring areas in which the different groups might work together to improve medical care for the indigent and the medically indigent population.

All five associations have been conducting independent studies over the last few years and now it is planned to establish a liaison unit through which they can work together.

At their first meeting, called at the request of Henry B. Mulholland, M.D., chairman of the Committee on Indigent Care of the AMA's Council on Medical Service, representatives of the five groups decided that the liaison unit would be known as "The Joint Conference Committee to Study Indigent Medical Care Problems." It also was agreed that the groups would prepare a joint statement on the general subject of indigent medical care for submission to and approval of their respective associations. A meeting to discuss details of such a joint statement has been scheduled for early in May. The representatives also decided that one or more field studies would be conducted during the summer by a joint staff representing each of the five associations.

"We hope," Dr. Mulholland said, "to work together in the field of indigent care in the same manner as these associations have worked together in the field of chronic disease. If such a joint conference committee can accomplish as much as the Commission on Chronic Illness, we believe the effort will be well worthwhile."

* * *

During the fourteen years Michigan Medical Service has been paying doctors for medical services to its subscribers to December 31, 1953, we have many times heard the criticism that the plan was only for the big city—that the country doctor was ignored. The total amount paid out during the fourteen years was $121,508,138.70, of which $53,669,047.52 went to Wayne County. The county receiving the least was Keweenaw, $930.50. Only six counties received less than $10,000: Kalkaska, $1,997.75; Keweenaw, Lake, $5,120.75; Mackinaw, $7,766.50; Montgomery, $2,903.00; Oscoda, $1,889.00. Twelve counties outside of Wayne received over one million dollars: Bay, $1,701,000; Calhoun, $1,091,000; Genessee, $7,937,000; Ingham, $4,151,000; Kalamazoo, $1,616,000; Kent, $4,730,000; Macomb, $1,646,000; Muskegon, $1,225,000; Oakland, $6,550,000; Saginaw, $3,761,000; St. Clair, $1,431,000; Washtenaw, $4,394,000.

As for the amounts paid to individual doctors or groups

(Continued on Page 692)

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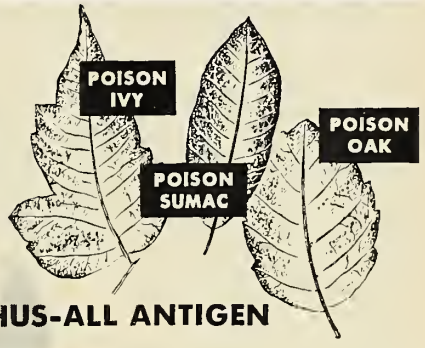
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(Continued from Page 690)

the top forty in 1953 were twenty-one radiologists, sixteen surgeons and three obstetricians. Seven of these were osteopaths. In the second forty there were fourteen radiologists, twelve surgeons, three obstetricians, one anesthesiologist, one eye, ear, nose and throat specialist, the rest not specified.

* * *

Reserve retirement point credits may be earned by Reserve Medical Corps officers on inactive duty who attend the sessions of the Section on Military Medicine during the annual meeting of the American Medical Association, June 23-25, 1954, San Francisco, California, the Department of Defense has announced.

This authorization covers eligible physicians who are Medical Corps officers of the U. S. Army, Navy and Air Force Reserves. Point credits will be awarded eligible Reserve officers on the basis of one for each day of attendance, provided sessions attended total more than two hours.

Scientific presentations for the three-day assembly of specific interest to civilian practitioners will be discussed by military medical authorities. They include the initial care of the severely wounded, arterial grafts in military surgery, retinal burns produced by atomic flash, a new rapid test for determining antibiotic treatment, and the medical experiences of physicians who were Communist prisoners in North Korea.

Civilian medical leaders who will participate in the program are Dr. Frank B. Berry, Assistant Secretary of Defense (Health and Medical), Dr. Louis H. Bauer of New York City, Secretary-General of the World Medical Association, and Dr. Stanley Olson, Dean of Baylor University College of Medicine.

Reserve officers will be required to register for each day's session with their respective service and properly authenticated reports of attendance will be forwarded to the cognizant Reserve reporting unit to assure creditation.

"The meeting provides an excellent opportunity for Reserve officers to earn credit points while being brought up to date on developments in the field of medicine," Major General Harry G. Armstrong, Surgeon General of the Air Force and Chairman of the AMA Military Medicine Section said.

* * *

The Calhoun County Medical Society and the Calhoun County Unit of the American Cancer Society held its tenth Annual Cancer Education Day on Tuesday, April 6, Hart Hotel, Battle Creek. Speakers were Harry M. Nelson, M.D., Detroit, on "Cancer Research" and Hugh Frederick Hare, M.D., Los Angeles, California, on "Roentgenological Diagnosis of Cancer."

* * *

Cyrus C. Sturgis, M.D., of Ann Arbor recently was inaugurated as President of the American College of Physicians.

Congratulations, Doctor Sturgis!

(Continued on Page 694)



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(Continued from Page 692)



At the Twenty-Sixth Annual May Clinic of the Ingham County Medical Society held on May 6 in Lansing, with 195 present, **Grover C. Penberthy, M.D.**, of Detroit, was made an Honorary Life Member of the Ingham Society.

* * *

A total of 945 was registeded at the recent Student American Medical Association Convention in Chicago. This was almost three times the registration marked up at the students' convention of 1953.

Michigan was ably represented by John Ryan and Dave Corbett, delegate and alternate, respectively, from Wayne University SAMA; and by Faye H. Batten and William Freye, delegate and alternate, respectively, of the University of Michigan SAMA. Allan Dawson, President of U of M students' branch, also was present at the convention. Dan Heffernan, President of Wayne SAMA and Treasurer of the national SAMA, was elevated to the Vice Presidency of the national SAMA at the Chicago convention.

The 1955 convention will be held at the Sherman Hotel, Chicago, May 6-7-8. Russell F. Staudacher, Executive Director of the SAMA, anticipates a registration next year of well over 1,200.

The Audio-Digest Foundation of the California Medical Association has recently undertaken the national distribution of tape recordings of latest medical information. The Foundation makes available to doctors everywhere three "postgraduate services": weekly issuance of a one-hour tape for general practitioners; semi-monthly digests in the fields of surgery, internal medicine and obstetrics-gynecology; and lectures and panel discussions on one-hour reels for individual or group purchase. For information write Mr. Jerry L. Pettis, Executive Director, 800 N. Glendale Ave., Glendale, California.

* * *

Medical Director M. W. Jocz, M.D., Grosse Pointe Park, recently appointed Louis W. Staudt, M.D., of Highland Park as Assistant Medical Director of Chrysler Corporation. Dr. Staudt is a member of the Michigan State Medical Society and the Michigan Heart Association.

* * *

Parke, Davis & Company of Detroit again has published a fine educational advertisement entitled "Let these experts on relaxing show you how to live with high blood pressure" which appeared in a recent issue of *Life* and other national magazines.

Congratulations to Parke, Davis & Company for its many public service messages.

* * *

The American Diabetes Association, Inc., announces its 1954 Diabetes Detection Drive for the week of No-

(Continued on Page 696)

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1. Rev. Gastroenterology 20:744 (Oct.) 1953; abstract in J. A. M. A., 153:1580 (Dec. 26) 1953.

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Thursday, October 14, 1954

Sponsors

Michigan Cancer Co-ordinating Committee
Michigan Division, American Cancer Society
Southeastern Michigan Division, American Cancer Society

Theme

"Cancer Control in the Spotlight"

Presiding—E. I. Carr, M.D., Lansing
Chairman of the Board, Michigan Division, ACS

Registration—8:00 A.M.

Conference Desk—Auditorium

Morning Session—9:00 A.M.

Addresses of Welcome
—Chairman E. I. Carr, M.D., Lansing
—Michigan State College representative

"Breast Cancer" and demonstration—(name to come)

"Cancer of the Lung"—Richard H. Meade, Jr., M.D., Grand Rapids

Intermission (10 minutes)

"Cancer in Children"—C. D. Benson, M.D., Detroit

"Report on Recent Research in Cancer"—Harry M. Nelson, M.D., Detroit

Luncheon (Ballroom)—12:15 P.M.

Presiding—Fred A. Coller, M.D., Ann Arbor
Professor of Surgery and Head of Department, University of Michigan

"Aims and Purposes of the Michigan Cancer Co-ordinating Committee"—C. Allen Payne, M.D., Grand Rapids, Chairman

Question-and-Answer Period—Moderated By Dr. Coller

Recess—2:00 P.M.

(Continued from Page 694)

vember 14-20, inclusive. For information and material write the Association at 1 East 45th Street, New York 17, New York.

* * *

The Michigan Health Council sponsored the following medical television shows, over WJBK-TV: April 11, "Common Sprains and Strains" by Francis B. MacMillan, M.D., and John M. Pendy, M.D., of Detroit; April 18, "Seizure"—a film by the Michigan Epilepsy Center; April 25, "New Drugs and Their Uses" by E. L. Burbidge, M.D., and H. F. Hailman, M.D., of Kalamazoo; and on May 2, "Polio Vaccine Trials" by Oscar D. Stryker, M.D., of Mt. Clemens, Mrs. W. Louis Boyington of Farmington and John D. Monroe, M.D., of Pontiac.

* * *

A very successful annual Clinic Day of Wayne University College of Medicine was held in Detroit on May 12. A reception honoring the class of 1904 preceded the

(Continued on Page 698)

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SURGERY—Surgical Technic, two weeks, July 26, August 9
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, August 9, October 11.
Surgical Anatomy and Clinical Surgery, two weeks, June 21, August 23.
Surgery of Colon and Rectum, one week, September 13
Basic Principles in General Surgery, two weeks, September 20
Breast and Thyroid Surgery, one week, June 21
Thoracic Surgery, one week, October 11
Esophageal Surgery, one week, October 4
General Surgery, two weeks, July 26; one week, October 4
Gallbladder Surgery, ten hours, October 25
Fractures and Traumatic Surgery, two weeks, October 25
GYNECOLOGY—Office and Operative Gynecology, two weeks, September 20
Vaginal Approach to Pelvic Surgery, one week, June 21
MEDICINE—Two-week Course September 27
Electrocardiology and Heart Disease, two weeks, July 12
Gastroenterology, two weeks, October 25
RADIOLOGY—Diagnostic Course, two weeks, October 4
Clinical Course, two weeks, by appointment
Radiation Therapy, by appointment.
PEDIATRICS—Clinical Course, two weeks by appointment.
Congenital and Rheumatic Heart Disease in Infants and Children,
One week, October 11 and October 18
Two weeks, October 11
UROLOGY—Two-week Urology Course, September 20
Ten-day Practical Course in Cystoscopy every two weeks.

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(Continued from Page 696)

annual banquet. On May 11, the University dedicated its new $3 million Medical Science Building.

* * *

Frank G. Dickinson, Ph.D., Chicago, Director of the Bureau Medical Economies Research of American Medical Association, addressed the doctors of medicine, dentists, and lawyers of Flint at a meeting sponsored by the three professional county organizations.

The program was dedicated to social security as it affects the professions of medicine, dentistry and law and was arranged by F. A. Barbour, M.D., who reported that this meeting was one of the most interesting and informative meetings ever held by the professional societies of Flint and Genessee County.

* * *

S. E. Gould, M.D., Eloise, served as chairman of the Second National Conference on Trichinosis held at the meeting of the American Medical Association, Chicago, on Monday, March 1. At this meeting, O. A. Brines, M.D., Detroit, represented the American Society of Clinical Pathologists; and Professor A. D. Moore, M.D., Ann Arbor, represented the Michigan Memorial-Phoenix Project of the University of Michigan.

* * *

The Detroit Historical Society honored Dr. Beaumont as "Citizen of the Month" during May, 1954. As part of its celebration, the Historical Society borrowed from the Michigan State Medical Society the Dean Cornwell painting "Beaumont and St. Martin." This painting will hang permanently in the Beaumont Memorial, Mackinac Island, beginning with the dedication of July 17.

* * *



H. B. Zemmer, M.D., Lapeer, Vice Chairman of the Council, MSMS, was elected President of the recently formed Michigan Association for Epilepsy at its first annual meeting, May 26, in Detroit. Willard W. Dickerson, M. D., Caro, was chosen Vice President. Other officers include Hugh W. Brenneman, Secretary, Therese E. Kidder, Treasurer.

The Michigan Association for Epilepsy is made up of individuals and representatives of organizations throughout Michigan interested in the co-ordination of the exchange of information on convulsive disorders among doctors of medicine, health agencies, lay organizations and individuals interested in this field. The Association also seeks the promotion of post-graduate professional training in convulsive disorders and the encouragement of development and expansion of research, treatment and educational facilities in the field. In addition, the Association seeks to implement wider public understanding of epilepsy.

Among those named to the Board of Trustees of the Michigan Association for Epilepsy are Z. Stephen



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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

Bohn, M.D., Detroit, H. Waldo Bird, M.D., Detroit, R. W. Waggoner, M.D., Ann Arbor, Willard W. Dickerson M.D., Caro, H. B. Zemmer, M.D., Lapeer, H. W. Brenneman, Lansing, Mrs. Therese E. Kidder, Detroit, Ralph L. Stickle, Lansing, Mrs. Helen Mager, Detroit, Charles Wright III, Detroit.

The Association's offices are located at 706 North Washington Street, Lansing.

* * *

Of interest to doctors of medicine is an article on pages 120 to 125 of the April 23, 1953, issue of *U. S. News and World Report* and an editorial in the April 21, 1953, issue of *The Saturday Evening Post*. These articles will tell you of the work of the Co-ordinating Committee on Pensions for the Self-Employed and the Pensionless Employed, Bureau of Medical Economic Research, AMA.

* * *

When cancer of the lung is treated promptly after discovery in its silent form, the majority of the lesions are still localized and favorable for cure.

* * *

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* * *

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

UNDERSTANDING THE JAPANESE MIND. By James Clark Moloney, M.D. New York: Philosophical Library. Price $3.50.

The author has assembled material that makes very interesting reading. He presents the historical background of a nation and, through psychoanalytical writings, has attempted to obtain a more clear understanding of the Japanese mind or way of thinking. The Japanese and possibly all the oriental races of people are patriarchal in their culture as opposed to the matriarchal, and differs greatly from our western cultures. He has learned through his studies, though it might have been assumed, that Freudian theories which were consummated in Vienna would not be applicable to a culture as opposite as that found in the Orient. There are chapters on child training and Japanese conformity, conformity and the type of psychoses that develops and the psychodynamics of hate dispersal. There is much of a philosophical nature in this book. After having read it, one can speculate what our military success and our temporary political rearrangement on these people will have ultimately accomplished.

G.K.S.

SONG OF LIFE WITH VARIATIONS. By H. Ameroy Hartwell, M.D. Boston: Bruce Humphries, Inc., 1954. Price $5.00.

The author of this book is a doctor of the old school, literally. He was born in 1874, and saw medicine practiced during a long and productive period. The first part of the book he devotes to introduction, early diagnosis, et cetera. Under the heading, "What's wrong with me," he lists many diseases in alphabetical order, and gives his comments. He introduces the subject in one or two sentences, then lists symptoms 1, 2, 3, and so on, line by line, until he has presented a sufficient concept. Then he mentions causes, and that is all; no treatment. After an interval, the reader discovers some very interesting poetry. "Uncle Sam's Convalescing" is rich, full of shrewd observations, hospital charts, and is well worth reading. Nearly sixty pages take care of Uncle Sam. The rest of the book is poetry—good poetry—on every imaginable topic. We enjoyed it.

FIFTY YEARS OF MEDICINE. By Lord Horder, G.C.V.O., M.D., F.R.C.P. New York: Philosophical Library, Inc. 1954. Price $2.50.

Lord Horder, after fifty years of practice, gave a series of lectures at the Royal Institute of Public Health in December, 1952. The three topics are published in this little book of seventy pages: I. The Birth of Scientific Medicine; II. Medicine Enlarges its Boundaries; III. The Present and the Future. The book is full of terse comments about the author himself and others. It is good reading—for entertainment.



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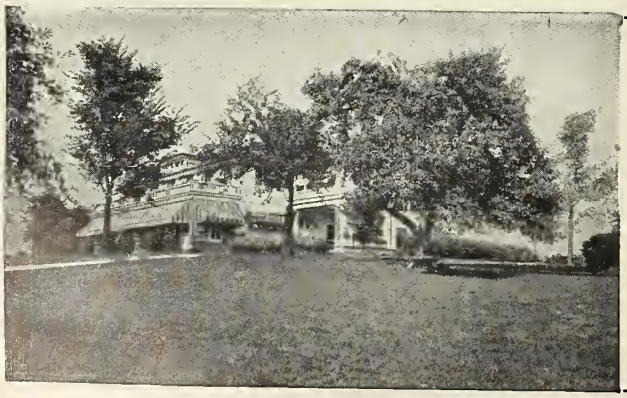
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*Straub, L. Ramsay, "Flatfeet," P. 131, Cecil's, "The Specialties in General Practice," W. B. Saunders, 1952.

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*Research information on wine is available upon request.

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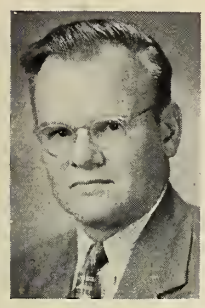
Contributors to This Issue



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ANNUAL SESSION

Sheraton-Cadillac Hotel

DETROIT

September 29-30-October 1

1954

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1. Heller, E. M.: The Treatment of Essential Hypertension. Canad. Med. Assn. Jour., 61:293, Sept., 1949.

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DOCTOR NOVY HONORED BY AMA



R. L. Novy, M.D., Detroit, was elected a member of the Council on Medical Service of the American Medical Association at its 103rd Annual Session in San Francisco. The election by the AMA House of Delegates occurred on June 24.

Doctor Novy, a Past President of the Michigan State Medical Society has been President of Michigan Medical Service (Blue Shield) since 1942. He is an outstanding authority among medical men on medical service plans and programs. The AMA has long relied upon the sage advice of Doctor Novy in matters touching medical service. His election as a member of the Council on Medical Service is final proof of his value to the medical profession in the special field of medical economics that has been his avocation for the past dozen years.

Doctor Novy merits the recognition given him by his confreres in the AMA House of Delegates. We salute our fellow practitioner of Michigan on this latest of a series of honors gained during an active life of unselfish work for his profession.

Congratulations to you, Doctor Novy!

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of May 19, 1954

One-hundred-twenty-three items were presented to the Executive Committee of The Council at its May 19 meeting in Lansing—a session that encompassed thirteen hours and ten minutes. Items of chief importance were:

- **Two physicians participating in care of patient and rendering single bill.** Report of Committee as requested by Executive Committee of The Council on April 1, was as follows:

"The general policy has been to adhere to the rules of the American Medical Association and the American College of Surgeons. As the College has for years approved the hospitals, the pledge demanded by those becoming members of the College, not to participate in the division of fees, has been the gauge in accepting appointment to the staff of most of the approved hospitals.

"In 1925, Dr. Franklin B. Martin, Director of the American College of Surgeons, stated, when two surgeons rendered a statement for services to a patient, combined itemization billing was acceptable; for example, if Dr. Brown operated upon a patient and Dr. White assisted him and the service was billed as Drs. Brown and White, total service $300.: Dr. Brown as surgeon $225. or $250; and Dr. White as assistant $50 or $75; 'kindly make payment direct to each physician.' This would be acceptable to the American College of Surgeons.

"We believe this is substantially the practice since, other than individual billing, by those who have maintained the standard of ethics of the AMA and ACS Neither the AMA nor the ACS have at any time countenanced the division of fees in any manner that leaves the patient uninformed as to what has taken place.

"The insurance companies to date have either paid the patient direct for the complete amount or in some cases have paid the physician for his care irrespective as to how many have been involved.

"In conclusion, it seems that most physicians throughout the country are waiting for the AMA's result of the rewriting of this question which no doubt led to the request for this information in the first place."

This report was approved.

- **Committee reports.**—The following committee reports were presented: (a) Mental Hygiene Comm., meetings of March 25 and April 21; (b) Michigan Cancer Co-ordinating Committee, meeting of April 8; (c) Child Welfare Committee, meeting of April 14; (d) Rural Medical Service, meeting of April 15; (e) Maternal Health Committee, meeting of May 4; (f) Emergency Medical Service Committee, meeting of May 5; (g) Rheumatic Fever Con-

(Continued on Page 712)

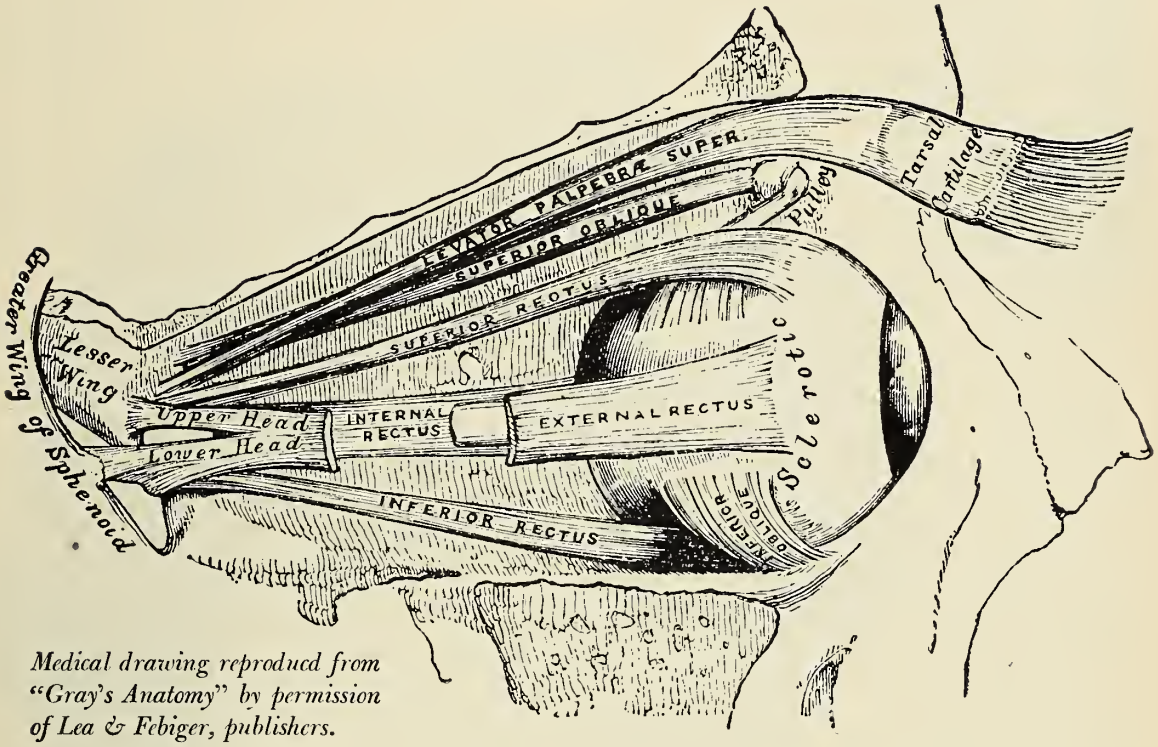
GENERAL PRACTICE DAY
1954 MSMS Annual Session

Thursday, September 30, will be "General Practice Day" at the Detroit Session of the Michigan State Medical Society.

The Assembly subjects on the second day of the convention are especially dedicated to the interest of general practitioners.

The General Practice Section also will meet on Thursday at the Sheraton-Cadillac Hotel, Detroit.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 710)

trol, meeting of May 12; (h) Committee on Arrangements for 1955 Michigan Clinical Institute, meeting of May 13.

- **Michigan Attorney General's opinion re** osteopaths serving on panels to adjudge insanity. Legal Counsel Herbert read recent opinion of Attorney General Frank G. Millard on this subject and also letter from Wayne County Medical Society. The Executive Committee of The Council advised the Wayne County Medical Society that MSMS concurs in the opinion of WCMS, that consultation of doctors of medicine and osteopaths is considered unethical, and that the situation arising from the Michigan Attorney General's opinion, to alter the present situation, must be left to the decision of the Judicial Council of the American Medical Association.

- **Beaumont Memorial.**—Otto O. Beck, M.D., Chairman of the Beaumont Memorial Committee, presented a detailed report on progress with the Beaumont Memorial and plans for its Dedication on July 17, on Mackinac Island.

- **President Hull reported** receipt of a letter from the Michigan Hospital Association requesting co-operation of the Michigan State Medical Society in connection with "Golden Goose" meetings for hospital trustees of the state; this co-operation was authorized.

- **Co-operation with the Michigan Crippled Children Commission** in the utilization of MSMS Committee of Ophthalmologists and of MSMS Committee of Otologists (Subcommittees of the Child Welfare Committee) was authorized.

  R. G. Ferris, M.D., Birmingham, and M. H. Pike, M.D., Midland, were confirmed as members of the Committee of Otologists, as appointed by President Hull.

- **President Hull reported** he had presented a photograph of Wm. J. Stapleton, Jr., M.D., on behalf of the Michigan State Medical Society, to Dr. Stapleton as Michigan's Foremost Family Physician at the Stapleton Testimonial Banquet on May 11 in Detroit.

- At the request of the Michigan State Dental Association, the Executive Committee of The Council addressed a communication to Congressman Chas. A. Wolverton in connection with H.R. 2340, pending legislation to prohibit fluoridation of water; the action of the 1953 MSMS House of Delegates favoring the fluoridation of water was reported to Congressman Wolverton.

- **Midwest Medical Association Officers' Conference.**—Chairman Bromme reported that the officers of the state medical societies of Indiana, Illinois, Kentucky, Ohio, Michigan, and Wisconsin, would hold their next conference in Madison, Wisconsin, in the autumn of 1954; and in Michigan in the autumn of 1955.

- **K. B. Babcock, M.D.,** Detroit, was reported as accepting appointment as director of the Joint Commission on Accreditation of Hospitals, and was leaving Grace Hospital in Detroit for Chicago in the near future. Congratulations and best wishes were extended to Dr. Babcock by the Executive Committee of The Council.

- **Annual Session.**—Secretary Foster reported that all guest speakers on the September, 1954, program had now accepted and the preliminary program has been developed and will be mailed early in August.

- **Michigan Cancer Co-ordinating Committee Lecture** at future Michigan Clinical Institutes. The offer of the MCCC to sponsor this lecture was accepted by the Executive Committee. The annual Lecture will be on cancer control.

- **The Executive Committee of The Council** approved the action of the Wayne County Medical Society re acceptance of blood donors with a history of malaria or jaundice: Wayne County Medical Society agrees that procurement of blood within its area be limited to clinical use only and that the local Red Cross blood bank should not accept patients with history of malaria or jaundice because of the actual or potential dangers of such blood.

- **Public Relations Counsel's report** included (a) MSMS Exhibit at 1954 Michigan State Fair; (b) change in MSMS office space in David Whitney House, Detroit; (c) legislation; (d) report on Washington trip of special committee (R. H. Baker, M.D., L. Fernald Foster, M.D., D. Bruce Wiley, M.D., G. B. Saltonstall, M.D., and Legal Counsel J. Joseph Herbert); (e) report on admission and budget committee meeting of United Health and Welfare Fund, Lansing, May 4-5; (f) distribution in Michigan of new AMA pamphlets; (g) MSMS Annual Session radio, television, and service club speakers—assignments and commitments; (h) Good Citizenship Campaign; (i) Beaumont Memorial brochure for Dedication of July 17.

- **Michigan Health Commissioner,** A. E. Heustis, M.D., presented eight matters of mutual interest including (a) progress report on maternity hospital licensing; (b) mailing of notifications of birth registration; (c) policy concerning immune serum globulin; (d) Michigan Department of Health budget 1954-55.

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Wayne University Alumni Day

Wayne University College of Medicine held dedication services for the new Medical Science Building, the testimonial dinner to William J. Stapleton, Jr., M.D., and the 68th annual session and clinic day, on May 11 and 12, 1954.

The dedication services at the new Medical Science Building were followed by a symposium on Medical Education. The moderator was Dean Joseph C. Hinsey, Cornell University, who spoke on Medical Education, the "Foundation of the Nation's Health;" "Trends in Medical Education" was the topic of Dean Joseph T. Wearn, Western Reserve School of Medicine. Associate Dean of Columbia University College of Physicians and Surgeons, Aura E. Severinghaus, closed the symposium discussing "The Liberal Arts Education in Preparation for Professional Responsibility."

The William J. Stapleton dinner at the Sheraton-Cadillac was sponsored by the Wayne University College of Medicine Alumni Association, Wayne County Medical Society and the Michigan State Medical Society, jointly, in recognition of Michigan's Foremost Family Physician for 1953, and as an outstanding man in the fields of medicine, law, pharmacy and letters. Louis J. Hirschman, M.D., a Past-President of MSMS, acted as toastmaster. Greetings were presented from the State of Michigan by Gov. G. Mennen Williams, from the City of Detroit by Health Commissioner Molner, representing Mayor Albert E. Cobo who was ill; from the Detroit Board of Education by Mrs. Jane H. Lovejoy, President; from Wayne University by Clarence B. Hilbery, Ph.D., President; from the Michigan State Medical Society by Leroy W. Hull, M.D., President; from Wayne County Medical Society by Edwin H. Fenton, M.D., President; from Wayne University Medical Alumni Association by Don F. Strohschein, M.D., President. A personal tribute was paid by The Honorable Joseph A. Moynihan, Presiding Circuit Judge of Michigan, a classmate in Dr. Stapleton's law class. Speaker of the evening was The Honorable Homer Ferguson, United States Senator from Michigan, who left Washington at 4 p.m. to attend the dinner. (Senator Ferguson's address appears in full on page 759.)

The Wayne University Alumni Clinic day consisted of addresses: "The Use of Electrolyte Solutions in the Treatment of Surgical Shock" by Carl A. Moyer, M.D., Professor of Surgery, Washington University, St. Louis, Mo.; "Clinical and Pathological Manifestations of Certain Occupational Pneumoconioses" by Arthur J. Vorwald, M.D., Chairman of the Department of Industrial Medicine, Wayne University, Detroit; "Rh Factor—Erythroblastosis" by Edith L. Potter, M.D., Associate Professor Obstetrics and Gynecology, University of Chicago, Chicago; "Prolonged Labor-Management and Treatment" by William J. Dieckmann, M.D., Mary Campau Ryerson Professor of Obstetrics and Gynecology, Chicago, Editor *American Journal of Obstetrics and Gynecology;* "Endometriosis" by George H. Garner, M.D., chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School, Chicago; "Cardiac Arrest," by Egbert H. Fell, M.D., Clinical Associate Professor of Surgery, University College of Medicine (Rush), Chicago.

During the noon period an inspection tour was made of the new Medical Science Building, followed by a luncheon with addresses by President Clarence B. Hilberry, Ph.D., and Dean Gorden H. Scott.

At the evening banquet, the Class of 1954 was officially inducted into the Alumni Association, with reply by William J. Donnelly, president of the class. Nine members of the Class of 1904 were present and were given half century diplomas. Letters and messages were read from those who could not attend.

Four men were named honorary members of the Wayne University Medical College Alumni: Gordon H. Scott, Ph.D., Dean of the School; L. Fernald Foster, M.D., Medical Secretary, Michigan State Medical Society; William J. Burns, LL.B.; Executive Director, Michigan State Medical Society; and Harry Lloynd, M.D., President Parke, Davis & Co.

A distinguished citation was given to Benjamin Levinson for his services in obtaining legislation, making possible the construction of the new Wayne University Medical Science Building.

The annual Alumni Association award for scholarship went to Ernest M. Gold, '54. Osborne A. Brines, M.D., Detroit, an alumnus, received a Distinguished Service Award for outstanding work in his specialty of pathology, and for being the President of the International College of Pathology.

Wilfrid Haughey, M.D., Battle Creek, an alumnus, also received a Distinguished Service Citation "for outstanding service to Medicine by pioneering in Blue Cross-Blue Shield organization and administration, and for his editorial services."

Meat...

and the Dietary Treatment of Gastrointestinal Disorders

A recent study points out that patients with peptic ulcer, ulcerative colitis or regional enteritis can effectively utilize good quality protein from animal sources.* Protein hydrolysates apparently are less effectively utilized than intact protein.

In patients with uncomplicated peptic ulcer on regimens providing intact animal proteins the patterns of amino acid excretion in urine and feces were similar to those in normal subjects. In patients with ulcerative colitis or regional enteritis the increased output of nitrogen and amino acids in the feces was attributed to loss of intestinal secretions, inflammatory exudate, and blood. Although the patients utilized intact animal proteins effectively, the authors suggested that an intake of more than one gram of dietary protein per kilogram of body weight might be useful.

On the basis of this study a dietary plan recommended for treatment of gastrointestinal disorders provides at least one gram, of protein per kilogram of body weight, but preferably more. Meat constitutes one of the important sources of animal protein in the plan.

In dietotherapy, meat serves many important physiologic and nutritional functions. Its appetizing flavor animates the desire to eat and promotes good digestion. Meat is easily and almost completely digested. Its high content of protein provides goodly amounts of all the essential amino acids well supplemented with others. Meat also contributes valuable amounts of many B vitamins and of essential minerals, especially iron, phosphorus, and potassium.

---

*Kirsner, J. B.; Brandt, M. B., and Sheffner, A. L.: Diet and Amino Acid Utilization in Gastrointestinal Disorders, J. Am. Dietet. A. *29*:1103 (Nov.) 1953.

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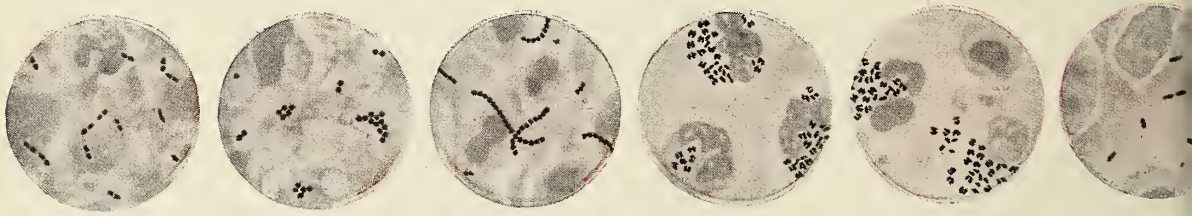
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WOMEN*



Heart Beats

PROCEEDINGS OF HIGH BLOOD PRESSURE MEETING PUBLISHED BY AMERICAN HEART ASSOCIATION

Developments in the field of high blood pressure research are described in five scientific reports of original investigative work which are included in the newly published Proceedings of the 1953 Annual Meeting of the Council for High Blood Pressure Research of the American Heart Association.

Intended primarily for internists, cardiologists, and investigators in the field of hypertension, the cloth-bound, 96-page hard cover monograph is available from Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, at a cost of $2.00 a copy.

The brief reports which deal with relations between endocrine secretions and electrolyte and fluid balance and hypertension, were presented by authorities who summarized their own recent work and the investigations of others in the field. The book compiles in one convenient reference volume material which otherwise is scattered throughout the medical literature.

Contributors to the volume include Dr. R. W. Sevy, of the University of Illinois, who reports on the influences of anterior pituitary gland and the adrenal cortex on experimental hypertension; Dr. Georges M. C. Masson, of the Cleveland Clinic, who reviews an experimental series on the role of renin in experimental hypertension; and Dr. Simon Rodbard, of the Medical Research Institute at Michael Reese Hospital. Dr. Rodbard discusses salt-water balance and body mechanisms in relation to hypertension.

The changing patterns of sodium metabolism in hypertension are described by Dr. D. M. Green, of the University of Southern California. Dr. George Perera of Columbia University, reporting on the role of metabolism in essential hypertension, discusses the possibility of a steroid, or steroid relationship, being a basic factor in the disease.

The 1953 Proceedings is the second volume in a projected series. The first volume, the Proceedings of the 1952 meeting, is still available, at a cost of $1.75, paper-bound.

HEART PATIENTS REASSURED ON SAFETY OF AIR TRAVEL

"Is it safe for me to fly, doctor?" is a question people with heart disease often ask their physician when planning a trip.

"If you can walk, you may fly" is a good generalization which experience has largely confirmed, says Captain Ashton Graybiel, Medical Corps, U. S. Navy, writing in the current (March) issue of "Modern Concepts of Cardiovascular Disease," which is distributed in Michigan by the Michigan Heart Association. The monthly medical bulletin is a publication of the American Heart Association. Dr. Graybiel emphasizes, however, the necessity for a comprehensive medical examination before it is determined whether it is safe for a patient to fly. In the absence of serious illness, he declares, the stresses which are encountered during air travel are easily borne and the problem narrows down to one of passenger comfort.

Reviewing data assembled from scheduled airlines by the Civil Aeronautics Authority over a five-year period, Dr. Graybiel found that the rate of deaths or incidents of unconsciousness during normal flight was very low. There was one death for every million and a half passengers carried, with heart disease the chief cause. There were six incidents of unconsciousness during flight per 100,000 passengers, with eleven per cent attributed to heart or circulatory disease. Both occurrences were more frequent in non-pressurized as compared with pressurized cabins, although differences in flying altitude were insignificant.

As an aid to physicians in advising their heart patients, Dr. Graybiel groups cardiacs according to their ability to withstand the stresses imposed by flight and suggests certain standards by which this may be evaluated, such as ability to walk or climb a flight of stairs. He emphasizes that other strains imposed by the journey should also be taken into account. These include the trips to and from the airport, climbing aboard the plane, the possibility of delay in takeoff or landing, or landing at an alternate airport if weather or other conditions are unfavorable.

Describing the stresses to which patients are subjected while aloft, Dr. Graybiel lists these as reduced atmospheric pressure, acceleration, vibration and noise, and in some cases the fear of danger.

Reduced atmospheric pressure, which can produce faintness or unconsciousness, earache or

(Continued on Page 720)

for greater safety in streptomycin therapy...

DISTRYCIN

Squibb Streptoduocin
Streptomycin and dihydrostreptomycin in equal parts

Distrycin has an important advantage over streptomycin. It has the same therapeutic effect but ototoxicity is greatly delayed. Since the patient is given only half as much of each form of streptomycin as he would have on a comparable regimen of either one prescribed separately, the danger of vestibular damage (from streptomycin) or cochlear damage (from dihydrostreptomycin) is significantly lessened.

Signs of vestibular damage appear in cats treated with Distrycin as much as 100 per cent later than in animals given the same amount of streptomycin.



Cat treated with streptomycin shows no nystagmus after whirling.



Cat given the same amount of Distrycin has normal reflex.

On dosage of 1 Gm. per day for 120 days, ototoxicity was as follows*:

	Vestibular damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	12	6	18
Dihydrostreptomycin	6	0	6
Distrycin	0	0	0

	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

SQUIBB

a leader in streptomycin research and manufacture

'Distrycin'® and 'Nydrazid'® are Squibb trademarks

Distrycin is supplied in 1 and 5 Gm. vials, expressed as base

(Continued from Page 718)

abdominal distress, is minimized today, Dr. Graybiel indicates, by the fact that planes flying higher than 8,000 feet are required to carry supplemental oxygen, while in pressurized cabins, the atmosphere is ordinarily kept well below this level. It is also possible, he points out, for heart patients to arrange for extra oxygen to be given throughout the flight. Earache, more common during descent than ascent, may be helped by frequent swallowing or by chewing candy or gum. Dr. Graybiel declares, however, that postponing a trip may be justified if the patient has a bad cold or sore throat.

Motion sickness is the chief problem created by the types of acceleration which passengers on commercial airlines are subject, says Dr. Graybiel, and certain preventive measures can be taken for those who are susceptible. He points out that the tendency to motion sickness is less in good weather than in bad, at night compared to daytime, and at high compared to low altitude. Seats in the center are preferable to those at the ends of the cabin. Keeping the head still and the eyes closed also help. Certain drugs, such as dramamine, are helpful in a large percentage of cases. Vibration and noise are important, according to Dr. Graybiel, to the degree that they add to fatigue.

Whether justified or unjustified, the anxiety or fears which air passengers sometimes manifest may have an unfavorable effect on the heart and circulatory system. Prevention lies in reassurance and in the use of sedatives, Dr. Graybiel declares. Much can be done by the flight attendant to prevent or relieve the symptoms produced by fear.

1954 Michigan Clinical Institute Registration

ATTENDANCE BY SPECIALTIES*

Anesthesiology	(3)	10
Dermatology-Syphilolgy	(12)	16
Gastroenterology-Proctology	(0)	7
General Practice	(269)	461
Medicine	(148)	206
Nervous and Mental Diseases	(13)	21
Obstetrics-Gynecology	(58)	77
Ophthalmology	(11)	16
Otolaryngology	(13)	20
Ophthalmology-Otolaryngology	(8)	9
Pathology	(12)	17
Pediatrics	(38)	66
Public Health	(7)	23
Radiology	(21)	30
Surgery	(173)	297
Urology	(12)	15
Residents and Interns	(154)	207
No specialty given	(86)	147
TOTAL	(1038)	1645

*Figures in parentheses denote number of physicians from Wayne County included in the total number.

PHYSICIANS OUTSIDE MICHIGAN

Canada, 37.

Chili, 1.

United States: California, 1; Illinois, 2; Indiana, 7; Maryland, 1; Massachuetts, 2; Minnesota, 1; Missouri, 1; Nebraska, 1; Ohio, 30; Pennsylvania, 1; South Dakota, 1; Wisconsin, 4.

MICHIGAN PHYSICIANS

Adrian, 6; Algonac, 2; Allen Park, 8; Alma, 2; Almont, 1; Alpena, 2; Ann Arbor, 58; Armada, 1.

Battle Creek, 13; Bad Axe, 1; Bay City, 18; Belleville, 1; Benton Harbor, 1; Berkley, 3; Birmingham, 7; Bloomfield Hills, 2; Bridgeport, 1; Breckenridge, 1; Brighton, 1.

Cadillac, 1; Caro, 2; Cass City, 1; Charlevoix, 1; Charlotte, 5; Clare, 2; Coldwater, 2; Coleman, 2; Coloma, 1; Coopersville, 1; Croswell, 2; Crystal Falls, 1.

Davison, 1; Dearborn, 35; Detroit, 906; Durand, 2.

East Lansing, 6; Ecorse, 4; Elkton, 1; Eloise, 15.

Farmington, 3; Fenton, 1; Ferndale, 5; Flat Rock, 1; Flint, 45; Fowler, 1.

Garden City, 2; Goodrich, 1; Grand Blanc, 1; Grand Rapids, 40; Grandville, 2; Grayling, 2; Grosse Pointe, 13; Grosse Pointe Farms, 3; Grosse Pointe Park, 1; Grosse Pointe Woods, 1.

Hanover, 1; Hamtramck, 1; Harper Woods, 2; Hartford, 1; Hastings, 5; Hazel Park 2; Hemlock, 1; Highland Park, 11; Hillsdale, 4; Holland, 2; Holly, 1; Holt, 1; Homer, 1; Howell, 2; Hudson, 1.

Inkster, 4; Ionia, 2; Iron Mountain, 2; Ishpeming, 1.

Jackson, 18; Jonesville, 1.

Kalamazoo, 20; Kalkaska, 1.

Lakeland, 1; Lansing, 53; Lapeer, 8; Lawrence, 1; Linden, 1; Lincoln Park, 5; Livonia, 2.

Mackinaw City, 1; Mancelona, 1; Manistique, 2; Marine City, 1; Marshall, 1; Melvindale, 1; Menominee, 1; Midland, 10; Milan, 1; Milford, 2; Monroe, 6; Morenci, 1; Mount Clemens, 10; Mount Pleasant, 2; Muskegon, 17; Muskegon Heights, 1.

Nashville, 1; New Baltimore, 1; Newberry, 1; Newaygo, 1; Niles, 1; Northville, 5.

Oak Park, 5; Okemos, 1; Onaway, 1; Ontonagon, 1; Onsted, 1; Owosso, 3; Oxford, 1.

Parchment, 1; Pentwater, 1; Petoskey, 1; Pigeon, 1; Pinckney, 1; Pleasant Ridge, 1; Plymouth, 3; Pontiac, 29; Port Huron, 7.

Reading, 1; Reed City, 1; Richmond, 1; River Rouge, 5; Rochester, 2; Romeo, 1; Royal Oak, 7.

Saginaw, 27; Saint Clair, Shores, 2; Saint Johns, 1; Saint Joseph, 1; Sandusky, 2; Saranac, 1; Sault Ste. Marie, 2; Shelby, 1; South Haven, 1; Sparta, 1; Spring Lake, 1; Springport, 1; Stockbridge, 1; Sturgis, 2.

Traverse City, 6; Tecumseh, 2; Three Rivers, 2; Trenton, 1.

Unionville, 1; Utica, 2.

Van Dyke, 5; Vassar, 2.

Wayne, 3; West Branch, 2; Whitehall, 1; Williamston, 1; Wyandotte, 17.

Yale, 1; Ypsilanti, 13.



Which filter-tip cigarette is the most effective?

ontinuing and repeated impartial ıtific tests, smoke from the new T consistently proves to have much nicotine and tar than smoke from other filter cigarette—old or new.

ne reason is KENT's exclusive Mi-ite Filter.

his new filter is made of a filtering erial so efficient it has been used to fy the air in atomic energy plants icroscopic impurities.

dapted for use as a cigarette filter, it removes nicotine and tar particles as small as 2/10 of a micron.

And yet KENT's Micronite Filter, which removes a greater percentage of nicotine and tar than any other filter cigarette, lets through the full flavor of KENT's fine tobaccos.

Because so much evidence indicates KENT is the most effective filter-tip cigarette, shouldn't it be the choice of those who want the minimum of nicotine and tar in their cigarette smoke?



Kent with the exclusive Micronite Filter

"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

here's why your patient gets



3:15—Disintegration Test begins in actual stomach fluids (pH 2.7). Beaker at left contains ordinary enteric-coated erythromycin. At right is new *FILMTAB** ERYTHROCIN Stearate (Erythromycin Stearate, Abbott).

arlier Blood Levels *from*

filmtab* ERYTHROCIN®

DISINTEGRATES FASTER THAN ENTERIC COATING

HIGH BLOOD CONCENTRATIONS WITHIN 2 HOURS



0—Five minutes later, *Filmtab** coating has already rted to disintegrate. The tissue-thin film actually begins dissolve within 30 seconds after patient swallows tablet.



3:30—*Filmtab** is now completely dissolved. At this stage, ERYTHROCIN is ready to be absorbed, and ready to destroy sensitive cocci—even those resistant to other antibiotics.



5—Now the *Filmtab** tablet mushrooms out with all of drug available for absorption. Note that enteric-coated let is still intact. Tests show that the new Stearate form initely protects ERYTHROCIN against gastric acids.

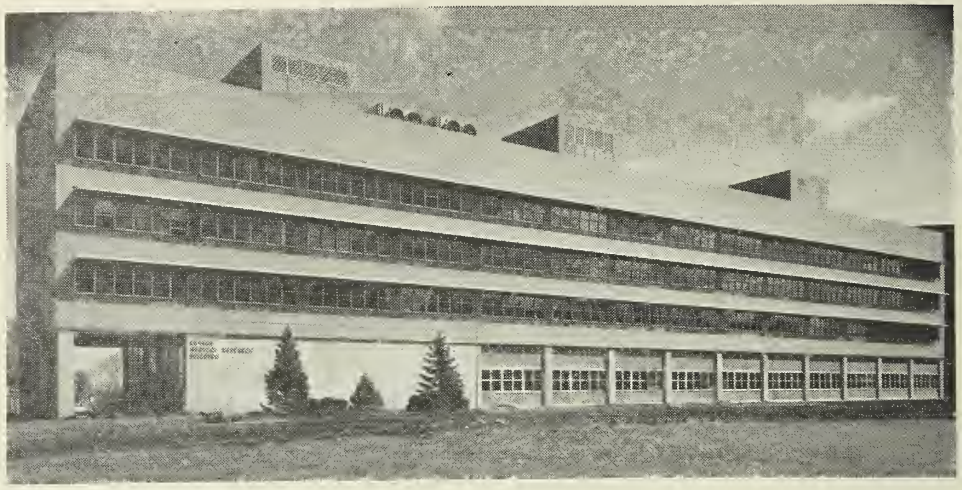


4:00—Because of *Filmtab** (marketed only by Abbott) the drug is released faster, absorbed sooner. In the body, effective ERYTHROCIN blood levels now appear *in less than 2 hours* (instead of 4-6 hours as before).

Abbott

for Abbott's film sealed tablets, pat. applied for.

Kresge Medical Research Building Dedicated



The University of Michigan's new $3,500,000 Kresge Medical Research Building was dedicated May 15, 1954. More than 300 guests participated in the dedication ceremonies at which President Harlan Hatcher presided.

The new research building was made possible through the interest and contribution of three million dollars by the Kresge Foundation. Additional funds from outside sources and private foundations were used in completing the research facilities in the building.

The Kresge Medical Research Building was designed to make a three-fold objective at the University of Michigan's expanding medical center: It will provide facilities for research in problems related to medicine and the auxiliary health sciences; it will provide training for a carefully selected group of men and women who have research ambitions and aptitudes; and it will bring together theory and practice in the interest of clinical research.

The building is 50 feet by 300 feet and consists of five levels of laboratories and animal quarters. There are 128 laboratory units, 28 animal units, and office, shop, locker, mechanical equipment and storage areas.

Research in the fields of physiological acoustics, dermatology-toxicology, intestinal diseases, hypertension, arthritis, anti-coagulants, central nervous system, cancer, and surgery will be housed in the new Kresge Building on the University Campus, just west of University Hospital.

At the dedication ceremonies Dean A. C. Furstenberg unveiled a portrait of Sebastian S. Kresge, benefactor of the building. The Dean also expressed gratitude to the Kresge Foundation of its contribution to the advancement of medical research.

The Dedication Luncheon was held in the Michigan Union Ballroom. Dr. Detlev Bronk, president of the Rockefeller Institute for Medical Research, former president of Johns Hopkins and alumnus of the University of Michigan medical school, made the principal address.

The afternoon program was devoted to a medical program. The following eminent medical scientists made presentations: Dr. Charles Huggin, professor of surgery, and Director of the Ben May Laboratory for Cancer Research at the University of Chicago, spoke on "Growth;" Dr. Wesley W. Spink, professor of medicine at the University of Minnesota, spoke on "The Epidemiology and Treatment of Brucellosis;" and, Dr. Sidney Farber, professor of pathology, and Director of Research at Harvard's Children's Cancer Research Foundation, spoke on "Some Basic Approaches and their Application to the Chemotherapy of Cancer."



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AMA Washington Letter

THE MONTH IN WASHINGTON

The controversial health reinsurance issue has come back into prominence, and under conditions that make the whole question about as complicated as it can get. The bill would have the federal government underwrite voluntary health insurance plans if they agree to experiment with risks not usually covered.

Although this measure is a major part of President Eisenhower's health program, it became bogged down in the House Interstate and Foreign Commerce Committee when widespread opposition developed. Then the committee chairman, Rep. Charles E. Wolverton (R.-N.J.), turned to one of his favorite subjects, a plan for federal guarantee of private loans to health facilities for construction and equipment. This bill, however, was not supported by the administration.

In an effort to placate the opposition, Mr. Wolverton offered to eliminate a number of objectionable features from the mortgage guarantee bill. At the same time there were reports that he proposed to merge this bill with the administration-supported reinsurance bill. Meanwhile, Henry J. Kaiser made two special trips to Washington to help out his friend, Mr. Wolverton, by putting his weight behind the mortgage loan idea. That was not surprising, inasmuch as Mr. Kaiser had helped to draw up the bill, which would greatly benefit health centers such as those started on the West Coast by the Kaiser Foundation.

Mr. Kaiser, saying he was producing a film to promote the mortgage loan plan, went to the unusual extent of making a direct appeal to Washington news correspondents to write favorable copy about the bill.

While these Wolverton-Kaiser maneuverings were taking place on the mortgage bill, it became apparent that President Eisenhower was not ready to abandon the reinsurance idea. He called a number of executives of major life insurance companies to the White House to try to impress them with the merits of reinsurance and in other ways indicated he still wanted to see the bill passed this session. Secretary Hobby, whose original testimony for reinsurance had been restrained, also joined in the last-minute campaign. But it appeared the tangle might be too complicated even for Mr. Eisenhower to unravel before adjournment.

Most other parts of the Eisenhower health program were moving through Congress, even though some were off schedule. (Of the major bills, AMA opposes only reinsurance.) Legislation to expand the Hill-Burton hospital construction program cleared what might have been a serious obstacle when it was reported out by the Senate committee. Compared with the House bill, the Senate bill gave more discretion to state health authorities in use of funds for constructing facilities for the chronically ill, for nursing homes, and for health centers. However, the Senate would require that funds earmarked for rehabilitation centers be used for the stated purpose. The Senate also would rule out the possibility of U. S. grants to centers devoted solely to treatment. Unless the facility could qualify as a diagnostic center, or a diagnostic-treatment center, it could not be eligible under the Senate bill. This safeguard was not in the House bill.

Of the remaining legislation of interest to the medical profession, the status at this writing was about as follows:

The doctor draft amendment, to strengthen Defense Department's hand in dealing with physicians who might be security risks, had passed the Senate, been reported by the House committee, and was almost a law. Also about to be enacted was a provision liberalizing medical expense deductions from taxable income. The long-dormant bill to transfer responsibility for Indians' health matters from the Indian Bureau in Interior Department to Public Health Service in the Department of Health, Education, and Welfare was pointed toward enactment, but might possibly be held up by objections of Senators from a few western states. The Interior Department had dropped its original objection.

The House-passed social security bill, with the compulsory coverage of physicians eliminated, was before the Senate Finance Committee, where anything could happen. Two bills of medical interest already had been passed by both houses and signed into law. One prohibits the shipment of fireworks into a state where fireworks are illegal, and the other relieves Army medical officers of the technical responsibility for supervising preparation of food.

A reassuring note was sounded by President Eisenhower when he forwarded to Congress the controversial International Labor Organization convention on minimum standards of social security with a recommendation that it not be ratified. His message said most of the points—including a suggestion for socialized medicine—were not proper subjects for the Congress to deal with.

NOT ARTHRITIS BUT ARTHRALGIA...

If the patient complaining of aching joints is a woman between 37 and 54 years of age, it is highly possible that she is suffering from arthralgia rather than arthritis.[1] It has been estimated that arthralgia occurs in about 40 per cent of women with estrogen deficiency, and is exceeded in frequency only by symptoms of emotional or vasomotor origin.[2] In fact, arthralgia may be as indicative of declining ovarian function as the classic menopausal hot flushes.

Arthralgia, however, is just one of a vast number of distressing but ill-defined symptoms that may be precipitated by the loss of estrogen as a "metabolic regulator." Other good examples are insomnia, headache, easy fatigability, and tachypnea.

Because these symptoms sometimes occur years before or even long after cessation of menstruation, they are not always readily associated with estrogen deficiency, and the tendency may be to treat them with medications other than estrogen. Obviously, sedatives and other palliatives cannot be expected to produce a satisfactory response if an estrogen deficiency exists. Only estrogen replacement therapy will correct the basic cause of the disorder.

"Premarin" is an excellent preparation for the replacement of body estrogen. In "Premarin" all components of the complete equine estrogen-complex are meticulously preserved in their natural form. "Premarin" produces not only prompt symptomatic relief but a distinctive "sense of well-being" which is most gratifying to the patient.

1. Greenblatt, R. B., and Kupperman, H. S.: M. Clin. North America *30*:576 (May) 1946. 2. McGavack, T. H., in Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 225.

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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

Estrogenic substances (water-soluble) also known as conjugated estrogens (equine)
Available in tablet and liquid form
has no odor . . . imparts no odor

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AMA News Notes

NUMBER OF PHYSICIANS IN UNITED STATES REACHES ALL-TIME HIGH

The total number of physicians—218,522—licensed to practice in the United States set an all-time record in 1953. Official figures from the 52nd annual report on medical licensure of the AMA's Council on Medical Education and Hospitals indicate that 7,276 persons were added to the medical profession in 1953. During the same period, 3,421 physician deaths reported to the AMA Headquarters gives a net increase of 3,855 in the physician population of the country. In 1952, an increase of 2,987 was reported.

The report appearing in the May 29 issue of *The Journal of the American Medical Association* shows that 14,434 medical licenses were issued in 1953 by the medical examining boards of the 48 states, the District of Columbia, Alaska, Canal Zone, Guam, Hawaii and Puerto Rico. Of this number, 6,565 were granted after written examination and 7,869 by reciprocity or endorsement of state licenses or the certificate of the National Board of Medical Examiners.

The present high level of medical education in this country is indicated by the fact that of the 5,646 graduates of approved medical schools in the United States to take examinations, only 3.8 per cent failed to pass. In comparison, however, of the 1,463 graduates of foreign medical faculties examined, 45.5 per cent failed.

Briefly, of the total number of physicians in the United States at the close of 1953—156,333 were engaged in private practice: 6,677 were in full-time research and teaching; 29,161 were interns or residents or physicians engaged in hospital administration; 9,311 were retired or not in practice, and 17,040 were in government service.

AMA PREPARES TWO CIVIL DEFENSE BOOKLETS

What part the physician should play in civil defense activities is aptly depicted in a series of six articles which AMA's Council on National Emergency Medical Service currently is offering in booklet form. Reprinted from *The Journal of the AMA,* these articles discuss such aspects as organizing for civil defense, developing medical participation in civil defense, the physician's civil defense responsibilities, and the doctor and the improvised hospital.

In addition, the Council now has available the "Proceedings of the Medical Civil Defense Conference" which was held in February in Louisville, Kentucky. This should prove a valuable sourcebook inasmuch as it contains rather thorough discussions of atomic bombing, the threat of biological warfare, civil defense against chemical warfare, psychological warfare, and a case study of a typical state's civil defense organization.

Both booklets may be secured on request from the Council.

AUXILIARY LAUNCHES "TODAY'S HEALTH" TEST

As a special test program of the national *Today's Health* committee of the Woman's Auxiliary to the AMA, each physician and dentist in Virginia not now subscribing to the magazine will receive a six-month subscription for his reception room. The offer will begin with the July issue and run through December.

During the fall months, members of the local auxiliaries in the state will personally contact each physician and dentist to take subscription orders for next year. It is hoped that as a result of this test, *Today's Health* will win many new friends during the coming months both among patients and the professions.

FILM ON ALCOHOLISM ADDED TO AMA MOTION PICTURE LIBRARY

Case studies of three types of alcoholics tracing the development of the disorder from origin are incorporated in a motion picture film which recently was added to the AMA's Motion Picture Library. Entitled "Alcoholism," this film attempts to show how the roots of this illness are imbedded personality difficulties often relating back to the formative years of the victim's childhood and how it can be treated through psychology. This black and white, sound, 22-minute film may be obtained from the Committee on Medical Motion Pictures for a service charge of two dollars.

NEW EXHIBIT ON SINUS TROUBLE

Persons in your home town suffering from clogged heads or draining noses will be especially interested in the new exhibit—"Sinus Trouble"—which the AMA Bureau of Exhibits now is offering to state and county medical societies for local showings at fairs and similar public gatherings. Depicting the location of the sinuses, diagnostic procedures and latest treatments now followed by physicians, this exhibit is available for immediate bookings through the Bureau.

AMA PRODUCES NEW RADIO SERIES —"THIRTY-FIVE"

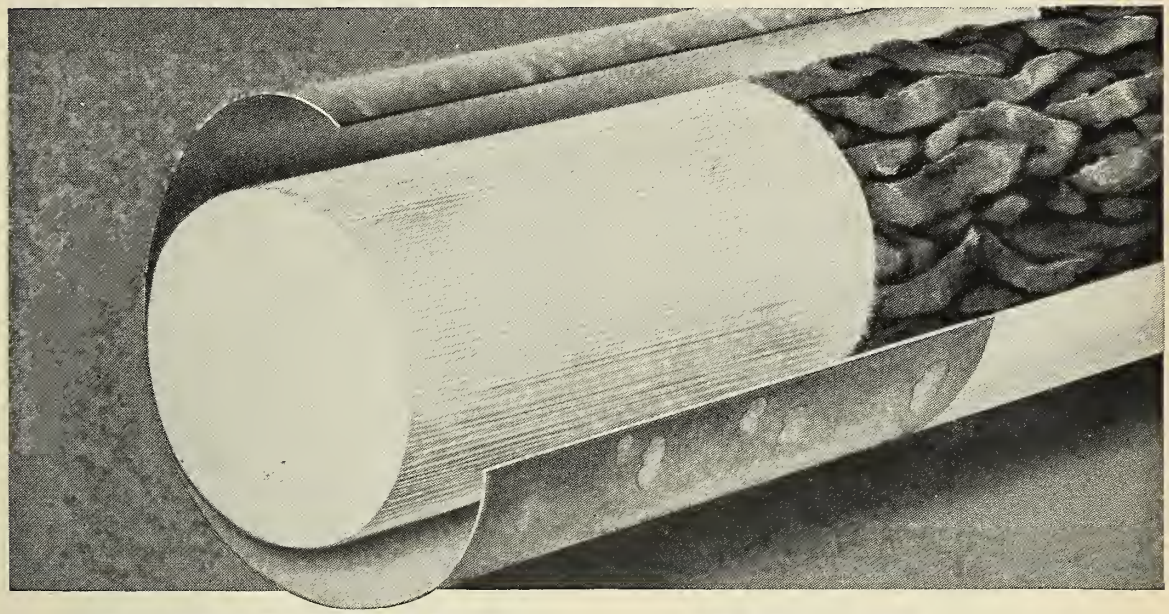
How to lead a healthy, happy life when you reach the half-way mark—thirty-five years of age—is the theme of a new radio transcription series prepared by AMA's Bureau of Health Education. Based on an article by Dr. Donald A. Dukelow of the Council's staff which appears in the July issue of *Today's Health* magazine, this series stresses the fact that, "Thirty-five is the half-way point —the time to check for defects before adding more mileage and more wear and tear to vital organs." Each of the thirteen programs in the series covers a different area of concern to those who have reached this mark.

(Continued on Page 750)

Thank You, Doctor!

To the 64,985 doctors who have visited Viceroy exhibits at medical conventions . . . and to the leaders in the medical profession who smoke and recommend Viceroy Filter Tip Cigarettes . . . we'd like to say "Thanks." Your approval of Viceroy has helped establish its leadership . . . *Viceroy now outsells all other filter tip cigarettes!*

NEW VICEROY GIVES SMOKERS
DOUBLE THE FILTERING ACTION!



1. NEW AMAZING FILTER OF ESTRON MATERIAL

20,000 tiny filter elements in this new-type filter tip, exclusive with VICEROY! Made of Estron—a pure, white cellulose acetate—this non-mineral filter represents the latest development in twenty years of Brown & Williamson filter research. It gives the greatest filtering action possible without impairing flavor or impeding the flow of smoke.

2. PLUS KING-SIZE LENGTH

The smoke is also filtered through Viceroy's extra length of rich, costly tobaccos. Thus Viceroy actually gives smokers *double the filtering action* . . . to double the pleasure and contentment of *tobacco at its best!*



ONLY A PENNY OR TWO MORE THAN CIGARETTES WITHOUT FILTERS



New King-Size Filter Tip VICEROY

OUTSELLS ALL OTHER FILTER TIP CIGARETTES COMBINED

PR REPORT

GET THAT ABSENTEE BALLOT!—Going to be on vacation August 3? If so, that's no excuse for failing to vote in the important Primary Election. You, and members of your family, can get absentee ballots from your county or city clerk any time before 2:00 P.M., Saturday, July 31. The importance of the Primary Election cannot be overemphasized.

Here are some other election dates to remember:

August 3—Primary Election.

October 4—Last day for registration to vote in the November General Election.

October 30—2:00 P.M. deadline for absentee ballot applications for General Election.

November 2—General Election.

BUILDING THE BEAUMONT STORY.—The Beaumont Memorial dedication on July 17 was a natural public relations vehicle for the Michigan medical profession, but the dedication ceremonies were just the beginning. Already the Michigan Tourist Council, for example, has started promoting the Beaumont Memorial as one of the outstanding historic landmarks on Mackinac Island. Transportation companies and other agencies with an interest in the Island have been supplied with material so that the "Beaumont story" may be incorporated in future brochures and travel information.

One of the most important developments is the decision of the University of Michigan to produce a motion picture on the life and work of Dr. Beaumont. University cameramen were assigned to the dedication ceremonies, and the Beaumont Memorial will be featured in the finished movie.

The Detroit Historical Museum, the Detroit Institute of Arts, the Michigan Historical Commission, and the Mackinac Island State Park Commission head the list of organizations which helped greatly in the advance plans for publicizing the Beaumont Memorial and its dedication. Many others, including a number of newspapers and radio and TV stations, must be added to the list.

ARE YOU A "GOOD CITIZEN"?—The 1954 "Good Citizenship Campaign," a reactivation of successful efforts in 1950 and 1952, has progressed smoothly during the pre-primary election period, thanks to the work of individual M.D.'s who value their responsibilities as citizens, and to the strong co-operation of the Woman's Auxiliary and allied groups. In the period between the primaries and the November 2 General Election activities are expected to go into high gear to assure competent representation in both Lansing and Washington.

SAMPLES OF FOUR NEW HANDY AND INFORMATIVE pamphlets from the AMA have been, or will be, received by all MSMS members. The attractive leaflets deal with four important subjects: Selecting a family doctor, medical progress, quacks, and the protection offered by the AMA Council on Pharmacy and Chemistry. They are among the handiest little publications produced lately and are available free of charge through the MSMS Public Relations Department. Here is a genuine opportunity to broadcast useful and factual information as one step in gaining better PR.

MSMS EXHIBITS AT STATE FAIR

At the Michigan State Fair, September 3-12, MSMS again will be represented by an exhibit, following the practice which has proved so worthwhile in the past. Each year at the fair thousands of Michigan citizens are given the story of modern medicine and the aims of the medical profession by visiting the MSMS exhibit.

WELCOME—The PR staff welcomed a new Field Secretary July 1. He is Warren F. Tryloff, who will be in charge of the Detroit Office replacing Dwight Jarrell. For more than two years Mr. Tryloff has been Field Secretary for the Michigan Health Council and has worked closely with MSMS in many projects. With the health council he has handled important phases of the M.D. Placement Program, the annual Rural Health Conference and the weekly "Court of Health" television show over WJBK-TV, Detroit, among other duties. His earlier background includes experience as president-manager of a retail business, study at Michigan State College, and wartime service as an Air Force officer, which ended with nine months as a German prisoner of war.

Mr. Jarrell resigned the Detroit post to become associated with the staff of an advertising agency there.

Another recent resignation was that of Mrs. Sally Danby, secretary to the PR Counsel for the past four and one-half years, who was well known to many MSMS members through her service as Press Room "hostess" at the Annual Session and Michigan Clinical Institute and her work with the Michigan State Medical Assistants Society.



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1-348-54

VISITORS AT RESEARCH LABORATORY

Members of the Berrien County and Cass County Medical Societies visited Eli Lilly and Company, May 12-15, 1954 and while guests of the company, inspected the Lily Research Laboratories and toured pharmaceutical, biological, and antibiotic production facilities.



Berrien County Society



Cass County Society

Pictured in the Berrien County group are:

Left to right, first row: James W. Perry, Lilly representative in Benton Harbor, and his wife, who accompanied the group to Indianapolis; Dr. and Mrs. John Manning, of St. Joseph; Mrs. William Johnston, of St. Joseph; and Dr. Paul Hanna, of St. Joseph. Dr. Hanna is a member of the Michigan Board of Medical Examiners, serving his third term.

Second row: Dr. and Mrs. James Galles, of St. Joseph; Dr. and Mrs. Alvin Winegar, of Benton Harbor; and Mrs. Ruth and Dr. Griswold Ruth, of Benton Harbor.

Third row: Dr. and Mrs. Marvin Strick, Dr. and Mrs. Alvin Swingle, and Dr. and Mrs. Claire Lawton, all of Benton Harbor.

Fourth row: Dr. and Mrs. F. G. Rice, Jr., of Niles; Dr. Charles Bush, of Berrien Center; Dr. Bertha Anderson, of Benton Harbor; Dr. Clayton Emery, of St. Joseph; and Dr. Richard Crowell, of St. Joseph.

Those in the Cass County group include:

First row, left to right: Dr. and Mrs. David Comstock, of Dowagiac; Mrs. Loupee and Dr. Sherman Loupee, of Dowagiac; and Mrs. Adams and Dr. U. M. Adams, of Marcellus. Dr. Sherman Loupee received recognition in 1952 as Michigan's doctor of the year.

Second row: Dr. Lawrence Rutz, of Marcellus; and Mrs. Loupee and Dr. George Loupee, of Dowagiac.

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Pancytopenia Associated with Rheumatoid Arthritis — Felty's Syndrome

Treatment with Cortisone and Splenectomy

By Ellis J. Van Slyck, M.D.
Detroit, Michigan

RECENTLY there has been a resurgence of interest in the hypersplenic syndromes, particularly because of attempts to manage idiopathic thrombocytopenic purpura with ACTH and cortisone, albeit without dramatic success.[3,8] Felty's syndrome, rheumatoid arthritis associated with splenomegaly and various blood cytopenias, is now accepted as a form of hypersplenism, although whether it should be considered a primary condition and unrelated to the rheumatoid arthritis, or secondary to the splenomegaly of rheumatoid arthritis, is not clear.

Wiseman and Doan[9] have postulated a mechanism of sequestration of blood elements and their increased destruction by a hyperplastic reticuloendothelial system in the spleens of these cases. Dameshek[2] proposed that a substance, assumedly humoral, elaborated by the spleen acted to inhibit the bone marrow normally, and that this action is pathologically increased in the large spleens of hypersplenism. Steinberg[6] uniformly noted a hyperplastic bone marrow in cases of Felty's syndrome, and felt the spleen acted in some way as a barrier between the overactive marrow and the cytopenic blood. Wiard and Robbins[7] described a case of Felty's syndrome in detail in which on one occasion a leukocidin was demonstrated in the patient's blood. This substance, found in the serum, lysed normal white blood cells in the presence of complement *in vitro*. Their patient refused splenectomy and subsequently died of an overwhelming infection. At autopsy phagocytic activity and hyperplasia of the reticuloendothelial system was manifest in the spleen, but also a maturation arrest of the white blood cell series in the bone marrow.

How these various data can be correlated to offer a satisfactory *modus operandi* for the spleen in cases of hypersplenism remains to be seen, but the beneficial effect of splenectomy in properly selected cases cannot be gainsaid.

An interesting idea related to the problem of rheumatoid arthritis and the spleen has been put forward recently by Steinberg.[5] He noted that removal of the pituitary in adult rats caused progressive splenic atrophy, and that splenectomy, conversely, caused hypertrophy of the anterior pituitary. The latter phenomenon was observed at autopsy in a human who had had a splenectomy several years previously. The assumption is that the spleen acts in some way to inhibit the anterior pituitary, and that following splenectomy there is an increase in endogenous ACTH. He then reported several cases of Felty's syndrome with striking improvement in their arthritic condition as well as their blood picture following splenectomy. He further suggested that in the presence of severe active rheumatoid arthritis and splenomegaly even though the blood picture be not alarming that splenectomy should be seriously considered.

The following case is interesting because the patient closely resembled clinically the fatal case of Wiard and Robbins mentioned above, and because cortisone was used prior to splenectomy.

Case Report

This white, single, forty-four-year-old male chef was admitted to the United States Army Hospital, Fort Eustis, Virginia, on February 11, 1953, with a secondarily infected fungus infection of both feet. He gave a history of having had a progressively deforming arthritis of his hands and feet of about fifteen years' duration. At the time of admission this arthritis was in a quiescent state, and was not of particular concern to the patient. About fifteen months prior to this admission he was examined and studied in a hospital in Japan where he had pneumonia. He was told at that time that his blood count was low, but he knew no further particulars and had been feeling well during the past year. He had had no episodes of bleeding either through the skin or from any orifice.

Physical examination on admission revealed a grey haired, rather pale, middle-aged man in no acute distress; temperature 98.6, pulse 72, blood pressure 120/70. Careful examination failed to reveal any petechiae or ecchymoses in the skin or mucous membranes. There was a shallow erosion on the hard palate beneath the upper denture. Eyes, ears, nose, and throat were normal. There were no palpable lymph nodes in the neck, axilla, or groin. The heart was normal in size, the rhythm was regular, and there were no abnormal auscultatory findings. The lungs were clear to percussion and auscultation. The abdomen was soft. The liver margin, palpable two fingerbreadths below the costal margin, was firm and non-tender. The spleen was felt three fingerbreadths below the left costal margin and was slightly tender. There was ulnar deviation of the hands and deformities of the fingers typical of rheumatoid arthritis. Similar changes were seen in both feet. None of the joints showed evidence of acute arthritis. Several varicose veins were present over both lower extremities, and a patchy, brownish pigmentation was present on both shins. Considerable maceration and desquamation was present between the toes. Swelling and redness was found around the fourth interdigital space on the left foot. Neurological examination was negative.

Laboratory Data: The red blood cell count was 3,250,000 per cu mm. Hemoglobin was 10.5 gms. per cent. The white blood cell count was 2,900 per cu mm with 91 per cent lymphocytes and 9 per cent neutrophils. The platelet count was 6,500 per cu mm. Serologic test for syphilis was negative. Bleeding time was normal, and coagulation time was seven minutes (capillary tube). Prothrombin time was normal. Red blood cell fragility to hypertonic saline was normal. NPN was 40 mgs per cent. Total proteins were 8.3 gms per cent. Serum albumin was 4.0 gms per cent, globulin 4.3 gms per cent. Thymol turbidity was 15 units. Cephalin flocculation was 4 plus in forty-eight hours. The BSP showed 2 per cent retention after forty-five minutes. Urinalysis was normal. Roentgenogram of the chest was normal.

Course in the hospital: The patient was given penicillin intramuscularly and potassium permanganate soaks to the feet, but the cellulitis responded extremely slowly. On two occasions the patient had moderate, spontaneous nose bleeds. The white blood cell count varied between 1,300 and 3,300 with the percentage of neutrophils ranging between 1 and 8. Platelet counts were always below normal.

On the sixteenth hospital day 0.75 cc of adrenalin hydrochloride 1:1000 was injected subcutaneously after two control blood counts had been taken, and blood counts were obtained at fifteen minute intervals for one hour following the injection. His white blood cell count rose from 1,800 to a peak of 5,900 in one-half hour without a change in the differential. There was a very slight rise in the red blood cell count and hemoglobin. Shortly before the peak rise in the white blood cell count occurred, his spleen became smaller and was now palpable only one fingerbreadth below the costal margin. This was interpreted as a positive adrenalin test and evidence of hypersplenism. Aspirated bone marrow was found to be hyperplastic, predominantly erythroid (normoblastic) in type. There was also, in some areas, a moderate increase in the number of reticulum cells.

It was felt that splenectomy was indicated in an attempt to alleviate the pancytopenia. However, it was decided to give the patient a two week course of cortisone prior to surgery, since this drug has been used with occasional benefit in allied hypersplenic states, particularly in idiopathic thrombocytopenic purpura. He received 200 mg on the first day of treatment, 100 mg on the second day, and 50 mg daily for the next twelve days. Following this the dose was tapered until discontinued. During treatment with cortisone there was a slight rise in the total white blood cell count, with a maximum neutrophil response to 11 per cent. Concomitantly subjective improvement in the small joints of the hands and feet with greater freedom of movement was noted. However, from the hematological standpoint it was felt that he was a treatment failure. Accordingly, it was decided to perform a splenectomy.

At operation on the forty-fourth hospital day the liver appeared grossly normal. The spleen was found to be greatly enlarged and engorged with blood. Its estimated weight *in situ* was 1,000 grams (Figs. 1 and 2). The spleen was removed through the transthoracic incision without incident. A total of 500 cc of blood was administered during and after surgery. Twenty-four hours after splenectomy the patient's white blood cell count was 7,000 with 52 per cent neutrophils, and the platelet count was normal. Aside from a post-operative atelectasis and pneumonitis in the left lower lobe, causing a subsequent rise in his white blood cell count to 11,000, he made a satisfactory recovery.

The patient was seen for a follow-up evaluation fifty days after splenectomy, at which time he had returned to his culinary duties. He had regained much of the weight lost during the post-operative period, although he fatigued easily. He could notice no change in the chronic stiffness of his hands. There had been no epi-

sodes of bleeding since operation. Laboratory data, at this time, was as follows: Red blood cell count 4,290,000 per cu mm; hemoglobin 13.0 gms per cent; white blood cell count 5,650 per cu mm with 25 per cent neutrophils, 66 per cent lymphocytes, 7 per cent monocytes, and 2 per cent eosinophils. The platelet count was 470,000 per cu mm. NPN was 29.0 mg per cent. Fasting Blood sugar was 78 mg per cent. Total proteins were 8.5 gm per cent. Serum albumin was 4.7 gm per cent, globulin 3.8 gm per cent, the A/G ratio being 1.2/1.

Ninety-six days after splenectomy the patient was feeling well with subjectively more energy than at any *time* during his illness. The hemogram at this time was as follows: red blood cell count 4,350,000 per cu mm; hemoglobin 13.0 gm per cent; and the white blood count 8,850 per cu mm with 42 per cent neutrophils, 52 per cent lymphocytes, 4 per cent monocytes, and 2 per cent eosinophils. The platelets were 304,000 per cu mm.



Fig. 1. *(above)* Resected spleen, convex surface. Weight: circa 1000 grams.

Fig. 2. *(below)* Resected spleen, hilar surface. Weight: Circa 1000 grams.

Discussion

A brief word about the adrenalin test is in order. Kracke[4] in his excellent paper on hypersplenism stressed the value of plotting the hematologic response and the change (decrease) in the size of the spleen following a subcutaneous dose of adrenalin, and considered a positive response as one of the criteria in reaching a definite diagnosis of hypersplenism. Our patient's response, although not dramatic, was clear cut. The spleen definitely became smaller to palpation just prior to the maximum rise in the hematologic response. This would correlate well with the mechanism of increased storage and sequestration of blood elements by the spleens in hypersplenic states. Recently, however, Chatterjea, Dameshek, and Stefanini[1] have re-evaluated the adrenalin test and state that it is not diagnostic of any clinical condition. They feel that, at the most, the test provides indirect corroborative evidence regarding the functional status of the blood-forming tissues, and to some extent the reservoir of blood cells present not only in the marrow and spleen, but in other tissues and organs throughout the body. They therefore feel that the degree of splenic participation in the adrenalin response is probably minimal. Furthermore, a negative test may be misleading.

The severity of the neutropenia in the case just reported is unusual in Felty's syndrome, and in this respect, as well as in several others, the patient resembled the fatal case of Wiand and Robbins. It was felt that the subborn refusal of the obvious bacterial cellulitis superimposed on the dermatophytosis to respond to antibiotic treatment and antiseptic soaks was, in part, due to this deficiency. Indeed, his ability to combat a more virulent infection might have been totally inadequate.

At the time we were confronted with the problem of managing this patient, there was no record in the literature of the use of cortisone in this particular form of hypersplenism, and it was hoped that even a temporary response would render him a safer candidate for major surgery. Since then Steinberg has reported similar results to that obtained in this case, namely, a temporary but inadequate improvement in the blood picture during treatment with rapid relapse upon cessation. However, the use of cortisone and ACTH in helping to prepare a patient for splenectomy may be valuable in some instances, and certainly further experience will be necessary to evaluate the problem properly. The theoretical drawback of retarded wound healing as a result of cortisone therapy has not been borne out clinically in other instances, and this is not a contraindication to its use as a preoperative medication in cases of hypersplenism.

Summary

1. A case of Felty's syndrome with pancytopenia is reported.

2. A course of cortisone resulted in very slight, temporary improvement.

3. Splenectomy produced a much more gratifying response.

4. A brief review of the contemporary knowledge of the pathological and physiological processes in hypersplenism is presented.

5. The combined use of cortisone and splenectomy in cases of severe blood cytopenias due to hypersplenism is suggested.

Acknowledgment

I wish to express my gratitude to Mrs. Dorothy C. Griggs for her help and co-operation in the Laboratory.

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2201 Jefferson Avenue East

A Serologist Abroad

By Reuben L. Kahn, D.Sc.

Ann Arbor, Michigan

MY RECENT trip to Europe (August 24 to October 7, 1953) was sponsored by the Wenner-Gren Foundation for Anthropological Research. The purpose was (1) to exchange views with microbiologists and anthropologists in certain European centers regarding differences in universal serologic reactions* given by different peoples and (2) to discuss with interested colleagues the question of collaborating in a project to determine universal reactions in different peoples on a world-wide basis.

Anthropological interest in the study of universal reactions in different ethnic groups had its beginning about one year ago. At that time, Dr. Frederick Thieme of the Department of Anthropology of the University of Michigan called to discuss with me the feasibility of undertaking serologic studies of archeological bones. The purpose was to determine whether positive reactions associated with syphilis might be encountered. Such studies seemed feasible. I then invited Doctor Thieme to look at charts illustrating universal reactions given by midwestern Americans and American Indians; also by East Indians and Negroes in Trinidad. The reactions given by the midwestern Americans were definitely weaker than those given by the other peoples. These findings interested Doctor Thieme and, not long after, he came to the Serology Laboratory with Dr. Paul Fejos, the Director of Research of the Wenner-Gren Foundation.

Impressed by these universal serologic data, Doctor Fejos expressed the belief that the Board of the Wenner-Gren Foundation would support studies of universal reactions in different ethnic groups. A project was thereupon formulated to undertake such studies, which was approved by the Board of the Foundation. Doctor Thieme was to collaborate with us as anthropological consultant. He believed that he would be able to employ fractions of the same blood specimens (intended for universal reactions) for blood group studies. In due time the Foundation sponsored the present trip abroad to discuss our universal serologic data at the Sixth International Congress for Microbiology (September 6-12) in Rome, and to visit certain centers in France, England and Sweden.

* * *

Before sailing, I stopped off in Washington to discuss the project of studying universal reactions of different peoples with Dr. Hildrus A. Poindexter, formerly Professor of Bacteriology at Howard University and, during recent years, Medical Director, United States Public Health Sevice, in charge of a medical unit in West Africa. My understanding was that Doctor Poindexter's next assignment would be in Asia, and I sought his cooperation in sending us blood specimens for universal reactions from individuals in his area.

Doctor Poindexter very thoughtfully had made an appointment for me to see his chief, Dr. H. van Zile Hyde, in charge of the Division of International Health of the Public Health Service. After I had stated the aims of the project to Doctor Hyde, he assured me that the personnel of the International Division would be glad to co-operate in this project, provided such co-operation would not entail additional expense to the Public Health Service. When I explained that there existed a University of Michigan trust fund, made available by the Wenner-Gren Foundation, to cover the cost of shipping blood specimens from different parts of the world to the Serology Laboratory, University Hospital, Ann Arbor, and there ought to be no appreciable cost to the Public Health Service, Doctor Hyde said that we might be receiving blood specimens from ten to a dozen units of the International Division stationed in different parts of the world. I very heartily thanked Doctor Hyde for making possible the collaboration of his Division in these universal serologic studies and said that I would get in touch with him on my return from Europe.

* * *

Our first stop in Europe was Genoa, where my wife and I spent several days (August 24-28). On arrival, Dr. C. Alfredo Romanzi, Professor of

From the Department of Dermatology and Syphilology, University of Michigan Medical School, and the Serology Laboratory, University Hospital, Ann Arbor.

*For those who are unfamiliar with this reaction, it is a blood serum reaction recently observed in this laboratory. It has been found to be positive in all persons and animals tested thus far; hence, it is referred to as "universal serologic reaction." The reaction is constant in health and undergoes changes in certain diseases. Its biologic significance is not yet fully understood. Of interest is the fact that different population groups give reactions of different intensities.

Bacteriology in the Hygienic Institute of the University of Genoa, met us at the pier. Two years previously Doctor Romanzi spent several months in Ann Arbor, dividing his time between the serology laboratory of the University Hospital and the virology laboratory of the School of Public Health. During a visit to his laboratory, Doctor Romanzi showed me universal serologic data on patients with early tuberculosis which was of considerable interest to me. Those patients who improved showed a reduction in the intensity of their universal reactions, while those who did not improve, showed no change. Doctor Romanzi had in progress several other experiments, one of which was to show the effect of irradiation on the universal reaction of rabbits. He is looking forward to collaborating in the Wenner-Gren project by studying the reaction in normal individuals in Genoa and, if possible, in Sicily. Doctor Romanzi was a most kind and gracious host to us during our brief stay in his native city.

En route to Rome to prepare for the International Congress for Microbiology, we spent the week-end (August 28-31) in Florence. Originally, I submitted two titles with abstracts for the program of the Congress: "Lipid Antigen-Antibody Reactions in Different Ethnic Groups" and "Syphilis-Specific and Non-Specific Aspects of Serodiagnostic Reactions." The former abstract consisted of six parts. Professor Ettore Biocca, the General Secretary of the Congress, believed that it would be best to present the data in six separate abstracts, each with an individual title. In following this plan, the titles alone took one-half page of the official program, which I regretted because it might have given the impression that I had originally submitted this large number of titles.

After presenting my papers at the Congress, there followed a general discussion during which many questions were raised. The discussion dealt particularly with the nature of the universal reaction, regarding which, there is still much to be learned. A question which seemed intriguing was why peoples of low economic status gave stronger universal reactions than midwestern Americans, presumably of higher economic status. Strong universal reactions must mean a strong capacity to produce the antibodies which play a role in these reactions. Why should peoples of low economic status possess strong capacities to produce these antibodies? Conceivably it is because these peoples are strong antibody producers when immunized or in cases of infection. Their lack of efficient medical care and of artificial immunizations may have caused them to become strong antibody producers as a means of survival. However, it is known that peoples of low economic status may possess high susceptibility to certain infections, such as tuberculosis. But such susceptibility is generally due to special environmental factors of which overcrowding and lack of proper sanitation play important parts.

A possible relationship between the antibody-producing capacity in immunity and infection, and the antibody-producing capacity in the universal reaction exists in animals. Thus, mice are known to possess a low capacity to produce antibodies in immunity and infection and they also show a low capacity to produce antibodies in the universal reaction. Rabbits, on the other hand, possess a high capacity to produce antibodies in immunity and infection, and they commonly show a high capacity to produce antibodies in the universal reaction.

Previously, we had believed that the strong universal reactions given by peoples of low economic status may be due to subclinical disturbances. However, while it is known that disease may intensify universal reactions, no data are as yet available indicating that subclinical disturbances may also intensify these reactions. Thus, the reason or reasons for the quantitative differences in universal reactions in different peoples must remain in the realm of theory until more extensive studies can provide the answer.

Following the discussion of my papers, Dr. José J. Escobar, Professor of Bacteriology at Valle University, Cali, Colombia, who had made some studies of universal reactions in the Silvian Indian tribe located in Silvia, the State of Cauca, expressed the desire to collaborate with us in further studies of universal reactions given by persons in his area. Also, Dr. Leo Olitzki, Professor of Bacteriology at the Hebrew University, Jerusalem, Israel, suggested collaborating with us by undertaking studies of universal reactions in Yemenite Jews and in certain Arab tribes. The details of these studies are to be arranged through correspondence.

Our stay in Rome was not entirely free from incidents of a personal nature. It was a great pleasure to have had tea with Professor Dante de Blasi, one of the grand old men of Italian medicine, whom we have known for many years.

The term "old" is not used here in relation to age. Italian physicians apply it as a term of endearment to Professor de Blasi who has taught bacteriology and hygiene to thousands of them. Another very pleasant incident was a visit from Dr. Mario Fiorentino, one of the outstanding clinical pathologists of Naples. Previous to World War II, Doctor Fiorentino had founded an Italian journal of laboratory medicine and was its editor for a number of years. It moved us deeply that Doctor Fiorentino came from Naples especially to see us.

It was difficult to say farewell to the Eternal City with its cathedrals, art centers, museums and monuments of a great past. It was particularly difficult to say good-bye to our many Italian friends.

In Paris (September 14-18), I spent considerable time with my colleague, Dr. R. A. Delauney, who is in charge of serology at the Institute Alfred Fournier, which is an outstanding center for the teaching of serology. The fall session was to have opened the following week. I had hoped to see the venerable Doctor Ledaditi, who became associated with that Institute after his retirement from the Pasteur Institute, but he had passed away only a week before our arrival. At the Fournier Institute, Mlle. Annette J. Hamelin has been carrying out universal reactions in parallel with treponemal immobilization tests.

Dr. R. Damanche, the dean of French serologists, whom I have had the pleasure of knowing for many years, gave me the opportunity of exchanging views with French colleagues at a dinner party at his home. Doctor Delauney, with Dr. Maurice Nell, an internist with a rich serologic background, also kindly entertained us and others interested in our studies. We missed the pleasure of a visit with Doctor LaPorte, serologist at the Institute Pasteur, and with his associate, Mlle. Feure, who keeps in touch with the serology laboratory of the University Hospital through correspondence, because they were absent from Paris at that time.

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Invitations to speak in London had reached us before we left Ann Arbor. One came from the Royal Anthropological Institute and the other from the Medical Society for the Study of Venereal Disease. The officers of the two organizations had learned of my coming to London from Dr. Hermann Lehmann of the Department of Pathology of St. Bartholomew's Hospital, with whom I have been in correspondence. An invitation also came from the rector of the Caroline Institute, Professor H. Bergstrand, which touched me deeply. It read: "The Royal Caroline Institute has the honour of inviting you to give a lecture in Stockholm on a subject you will find suitable. The Institute would appreciate very much if you could accept this invitation." The fact is that it is I who felt greatly honored to speak at the world-famous medical center. Rector Bergstrand has since retired and the new rector, Professor Sten Friberg, kindly wrote me at Paris to confirm the time of my talk.

The invitation to lecture at the University of Lund came from Professor Arvid Lindau of the Bacteriological Institute of that University, whom I have had the pleasure of knowing for many years. Professor Ernst Barany, of the University of Uppsala, who is secretary of the Swedish Inter-University Committee for Medical Guest Lecturers, invited me to speak also at the Universities of Uppsala and Gothenburg. The Swedish university authorities learned of my coming from Dr. Bertil Josephson of St. Eric's Hospital, Stockholm, who had visited us in Ann Arbor some years ago, and with whom I have kept in touch through correspondence.

The Royal Anthropological Institute occupies its own building at 21 Bedford Square, London. It publishes the *Journal of the Royal Anthropological Institute* and other publications, and is managed by a very capable secretary, Mrs. Angela C. Bowe. I spoke at the Institute at 5:30 p.m., September 24, on the topic "Serological Differences in the Sera of Different Peoples." The Chairman was Dr. A. E. Mourant of the Lister Institute, the authority on blood groups. The session lasted until about 7:30 p.m., after which we were dinner guests of members of the Institute.

The meeting of the Medical Society for the Study of Venereal Disease was held at 7 p.m. on September 25, in the medical building at 11 Chandos Street, Cavendish Square, London. In accordance with British custom, light refreshments were served before the meeting in contrast to the American custom of serving refreshments after medical meetings. The President of the Society, Dr. Neville Mascall, was Chairman, and Dr. C. S. Nicol, Secretary. The title of my paper was: "Clarifying Syphilitic and Nonsyphilitic Serodiag-

nostic Reactions." It developed during the discusson that several in the audience had performed universal reactions in Baghdad while associated with the World Health Organization laboratory in that city. Dr. A. E. Wilkinson, of the Whitechapel Clinic, Turner Street, reported experiments on universal reactions in rabbits. At that meeting I was delighted to see Col. H. W. Harrison, retired, formerly in charge of venereal disease control of the British Ministry of Health, who was a fellow delegate at the serological conference of the League of Nations Health Organization at Copenhagen in 1928.

Our stay in London extended from September 19 to 27, and some time was utilized in making official calls. Our first call was on Dr. Hermann Lehmann, St. Bartholomew's Hospital, who gave us generously of his time throughout our stay. Then we called on Dr. I. W. S. Blacklock, Professor of Pathology and Bacteriology of that Institution. We visited the School of Hygiene and Tropical Medicine and called on Dean Andrew Topping and on Professors E. T. C. Spooner and J. C. Cruickshank of the Department of Bacteriology. The school was to resume sessions in about a week. We called on Doctor Mourant at the Lister Institute and saw some of the work going on in the laboratories. We visited the Wright-Fleming Institute, St. Mary's Hospital, and had a glimpse of the laboratory of Sir Alexander Fleming. We had already had the pleasure of visiting with Sir Alexander and Mrs. Fleming in Rome. Unfortunately we missed Professor Robert Cruickshank of the Institute, who was absent from the laboratory at the time we called. We also visited the Chester Beatty Institute for Cancer Research. Dr. Alexander Haddow, its director, whom I had met in the United States, kindly showed us around.

The last lap of our journey began on September 27, when we boarded a plane in London for Sweden, where I was to lecture at the University of Lund the next day. In the absence of an airport in Lund, we landed at Malmo, which is eight miles distant. After my talk at the University, we enjoyed the hospitality of Professor and Mrs. Lindau at a buffet supper in their home, where we had the pleasure of meeting a number of faculty members of the University. The next morning Professor Lindau kindly drove me to the cemetery where the late Professor John Forssman, of the Forssman antigen fame, is buried. In 1928, my wife and I were the guests of Professor and Mrs. Forssman in Lund, and that visit has remained memorable. The rest of the morning was devoted to discussions of theoretical and practical problems of serology with younger members of Professor Lindau's staff.

The evening of the same day (September 29) we arrived by plane in Stockholm. The next day we traveled to Uppsala, the ancient capital of Sweden, where I spoke at the University. The lecture was arranged by Professor Gunnar Löfström of the Bacteriological Institute. That evening the pleasure was afforded us to meet a number of the faculty members of the University at dinner in the home of Professor and Mrs. Löfström.

On the morning of September 30, Professor Berndt Malmgren, head of the bacteriological laboratories at the Caroline Institute, came to see us at our hotel. He had arrived in Stockholm the previous day and he wanted to make sure that we were comfortably settled. My lecture at the Institute was scheduled for October 2, in the auditorium of Professor Sven Hellerstrom's Dermatological Department. Professor Hellerstrom had visited Dr. Arthur C. Curtis, Chairman of the Department of Dermatology and Syphilology at the University of Michigan, the previous year. On the day of the lecture, Professor Malmgren kindly came for us early enough to show us his laboratories and other departments of the Caroline Institute. He showed us plans for a new bacteriological building. His bacteriological laboratories are temporarily located in the chemical building.

After my lecture at the Caroline Institute, Professor Malmgren, his associate, Dr. Hans Ericcson, and Dr. Gunnar Olin, Director of the State Bacteriological Institute of Sweden, were our hosts at a luncheon at the famous "Djurgardsbrunns Wardshus" restaurant, built in the fifteenth century. Professor Malmgren's interest in the universal reaction led to the question as to what type of reactions Swedish people might give, since they represent very nearly a pure population strain as compared with Americans who represent a mixture of different peoples. Both Professor Malmgren and I felt that it would be extremely worth while to determine the universal reactions of Swedes, Danes and Norwegians, as well as of Finlanders, Greenlanders, Icelanders and Laplanders.

To carry out such a plan it would be necessary to set up a unit for universal serologic tests at the Caroline Institute, and Professor Malmgren suggested that I discuss details with Dr. Hans Ericcson and Miss Elsa Ejlertson, of the serology laboratory of the Institute. Miss Ejlertson is familiar with the universal serologic technique, having spent three months at the serology laboratory of the University Hospital, Ann Arbor, in 1948. Both Doctor Ericcson and Miss Ejlertson were enthusiastic about the plan. It is hoped that it will be possible to put the plan into operation. Some very valuable data might thus be obtained.

On the evening of October 3, we were dinner guests at the home of Professor and Mrs. Malmgren. The next day we lunched with Doctor and Mrs. Ericcson. That afternoon Miss Ejlertson took us to Stanken, the famous historical museum and park of Stockholm, and then to tea. These visits gave us an opportunity to discuss various aspects of the project to set up a unit for the study of universal reactions in the peoples of Northern Europe.

The following morning (October 5), Dr. H. Lundbeck, chief serologist at the State Bacteriological Laboratory (under the direction of Professor Gunnar Olin) called to take us to that laboratory, which in Sweden corresponds to the National Institute of Health in the United States. Doctor Lundbeck and I discussed serologic problems and later, at lunch, we were joined by Professor Olin. The high incidence of poliomyelitis in Sweden was discussed by Doctor Olin and the question was raised whether a relationship might exist between weak universal reactions and a high incidence of poliomyelitis on the one hand, and strong universal reactions and a low incidence of poliomyelitis, on the other.

The next morning (October 6), we left Stockholm by train for Gothenburg. I was to speak that evening at the University of Gothenburg. Professor Orjan Ouchterlany, Head of Bacteriology, drove us to the University. After my lecture, Dr. Olaf Sievers, chief of the bacteriology laboratory of the City of Gothenburg, arranged a dinner party at a local hotel at which also were present Doctor Siever's associate, Dr. Costa Vahlne, and Dr. Astrid Fagreus, of the State Bacteriological Institute. Later in the evening a faculty group joined us for refreshments at the home of Professor Georg Seeberg, who is in charge of the Dermatological Clinic of the University.

The next day, standing on the deck of the S.M. "Stockholm" bound for home, we waved *"farval"* to Sweden with deep appreciation for the hospitality extended to us.

* * *

There were certain highlights not connected with the specific purpose of the trip which impressed us greatly. Contrary to our previous travel experiences, our baggage was not opened for inspection by custom's officials at any time in Europe. It was passed from country to country as though the dream of a United Europe had materialized. Our passport was stamped on arrival in a given country and on departure, and that inspection took perhaps thirty seconds each time. As is well known, visas are no longer necessary. While the immediate reason for such official action is undoubtedly to stimulate travel, nevertheless it is a hopeful sign in international good will.

During our brief stay in Florence, it was an inspiring experience to stand before the tombs of Galileo, Michelangelo, Rossini, and of a number of other immortals in the Church of the Holy Cross (Santa Croce). As was the custom of the times, beautiful life-size marble statues of feminine figures were placed beside or above these tombs, some very sad-faced and others weeping. To stand before the tomb of one great master is enough to move one deeply, but to stand before tombs of numerous immortals is an experience never to be forgotten.

Another inspiring experience was to see original letters written by Shakespeare, Francis Bacon, Isaac Newton, a letter written by Galileo to Michelangelo, writings of Leonardo da Vinci, William Harvey, and Martin Luther; a letter written by Erasmus to a Dutch statesman on Luther's marriage in 1525; writings of John Locke, Voltaire, Victor Hugo; musical compositions written in long hand by Johann Sebastian Bach, Handel, Mozart, Haydn, Beethoven, Mendelssohn, Schubert, and writings of Rembrandt, Rubens, and of many other immortals.

As the reader may have surmised, these rare manuscripts were at the British museum. One hand-written manuscript we shall never forget. It is faded and not legible except to experts. It is the Magna Carta, signed by King John on June 15, 1215. What a revolutionary step it was, at a time when kings were the law, for one of

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Interpretation of Positive Serologic Tests for Syphilis in Clinically Negative Patients

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THE EFFECTS of penicillin on the management of syphilis are well known. Modern methods enable the general practitioner to treat nearly every patient with the disease that comes to his attention. However, simplicity of treatment has not solved all problems, for certain aspects of the differential diagnosis of latent syphilis remain confusing to all. Recent emphasis on biologic false positive tests for syphilis has had the unfortunate consequence that some physicians are concluding without adequate investigation, that a positive test result in a patient "who should not have syphilis" must represent a biologic false positive type of reaction. The results of an accepted serologic test for syphilis (S.T.S.) can never be ignored, and the reasons for a positive test must be established if at all possible. The withholding of antisyphilitic treatment because of an erroneous diagnosis of a biologic false positive reaction can have disastrous consequences for the patient and his community. At the same time, the erroneous diagnosis of syphilis can have psychologic and social reprecussions of great magnitude. In addition, as Moore[4] has pointed out, the biologic false positive serologic test may itself be of diagnostic value as one of the early indications of one of the collagen diseases.

Before considering steps in the differential diagnosis of latent syphilis and biologic false positive serologic tests for syphilis, it is well to indicate some of the reasons for recent increased concern about biologic false positive tests. During the past fifteen years, serologic tests for syphilis have been more widely used than ever before in the history of the disease. These tests have been performed as part of routine medical examinations, mass surveys, to comply with legal requirements for marriage, prenatal examinations, and induction into the armed forces. The widespread application of these tests has detected unprecedented numbers of cases of syphilis, but it necessarily follows that such wide use has detected a large number of biologic false positive reactors. This is the first factor.

The second factor is the decline in the prevalence of syphilis in the United States during the past five to ten years. Since there is no reason to believe that there has been a similar decline in the prevalence of chronic biologic false positive reactors, the *relative* number of such reactions has been increasing.

A third factor contributing to the present emphasis on false positive tests is that during the past several years marked improvements have been made in the various serologic test for syphilis. The efficacy of these advances has been determined in part by their value in the differentiation of syphilis and biologic false positive reactions. Such studies have served to emphasize, perhaps unduly, the magnitude of the biologic false positive problem.

Steps in Evaluating a Positive Serologic Test

With this background we may proceed to the steps which should be taken in the interpretation of positive serologic tests for syphilis in clinically negative patients. We shall start with a patient on whom a positive S.T.S. has been reported. Individual circumstances may make necessary certain deviations from the following sequence, but the information outlined is essential in the total evaluation of the patient even if the new techniques such as the Treponema pallidum immobilization (T.P.I.) test are employed.

1. *Repeat the Test.*—For the reason that mistakes do happen, one should repeat the test. Mistakes in labelling and in technique happen in the hospital, the office, and the laboratory. While the number of such mistakes should be small, it is essential to make sure that the first positive test is confirmed.

2. *S.T.S. Using Cardiolipin Antigens.*—Although the superiority of cardiolipin test is not universally accepted, we feel that tests employing cardiolipin antigens can be as sensitive as, and somewhat more specific than, tests using lipoidal antigens. Through the use of such cardiolipin antigens, a few biologic false positives may be eliminated. Since this is a relatively simple task we recommend it as the second step in diagnostic procedure.

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If it is found that repeated S.T.S. using lipoidal and cardiolipin antigents are positive, we may conclude that the patient's serum contains reagin. For practical purposes this reagin may be considered as one of the antibodies to *Treponema pallidum,* but it is impossible to know at this point whether the patient's reagin is due to syphilis, past or present, or whether it represents reagin produced by a nonsyphilitic cause.

3. *Adequate History.*—At this stage, the clinician re-enters the picture to obtain information as vital as the laboratory result. It requires skill and perseverance to obtain a true history, since the possibility of syphilis is an eventuality that many patients will conceal, even though they have themselves sought medical aid.

Inquiry should be made as to serologic tests performed during the past, the result of these tests, and the reason for having them performed. History of antibiotic therapy should be obtained, as well as any history of heavy metal therapy. Following intensive treatment of syphilis, it takes some time for serologic tests to become negative and, of course, with the perhaps 50 per cent of the patients who are treated late in the disease, the serologic test may never become negative. Not infrequently patients will present themselves to another physician, to blood donor centers, or to other places where they can obtain serologic tests for syphilis in order to obtain an independent check on their status.

A history of other venereal diseases may be somewhat easier to obtain than a history of syphilis. While the fact that a patient may have had one venereal disease does not prove that syphilis is responsible for his positive blood test; the fact that he has had one disease makes him a member of that community in which venereal diseases are common. At the same time, it should be remembered that there are some venereal diseases that occasionally may give rise to biologic false positive serologic tests for syphilis. History of exposure of epidemiologic evidence may play an important part in evaluating the patient. If the patient is known to be a sexual contact of another individual having infectious syphilis, the weight of evidence is strong that the patient's positive S.T.S. also may be due to syphilis.

Inquiry as to travel has assumed particular importance in relation to those who have been in the armed forces and who may have been exposed to some of the exotic diseases which sometimes produce biologic false positive tests. Domestic travel may be equally important, however, depending upon whether that travel may have resulted in increased possibility for infectious exposure.

Inquiry should be made as to recent vaccination and with regard to recent illness, especially considering those types known to produce acute biologic false positive tests. These diseases are considered below.

One important item which is commonly overlooked is the painting of an adequate family history. The medical status not only of the father and mother, but also of siblings, children, wife, and pregnancies are important in the evaluation of the patient.

4. *Physical Examination.*—A careful and thorough physical examination of the patient is of utmost importance at this point. While the title of our paper assumes that the patient is "clinically negative" experience has shown that the patient may sometimes be "clinically negative" only because careful examination has not been made. Signs of early syphilis are not particularly confusing but they easily can be overlooked in a cursory, superficial examination. In the search for signs of late syphilis, careful neurologic examination is essential to detect possible central nervous system involvement. Stigmata of congenital syphilis are among the frequently overlooked physical findings. The physician also should search for signs of acute illness which may be responsible for an acute biologic false positive test.

There are a number of nontreponemal diseases which may, from time to time, give acute biologic false positive serologic tests for syphilis. The highest incidence of false positive reactions occurs in malaria and in leprosy where from 50 to 100 per cent of the patients at some time during the course of their illness may show an acute biologic false positive serologic test for syphilis. For example, in special studies in which normal volunteers have been given malaria and carefully followed serologically, it can be demonstrated that at some time during the course of their illness, all malaria patients will show a positive serologic test for syphilis with the usual lipoidal antigens. Tests with cardiolipin antigens do not, as a rule, show this same nonspecific type of reaction. The duration of this positive test is relatively short,

and it is characteristic of practically all of the acute biologic false positive reactions that with time and with the subsiding of the acute illness the serologic test will revert to normal.

Diseases in which biologic false positives in tests using the lipoidal antigens frequently occur include lupus erythematosus, infectious mononucleosis, "atypical" pneumonia, lymphogranuloma venereum, relapsing fever, typhus, and rat-bite fever. Somewhere between 20 and 50 per cent of the patients with these diseases may show a positive serologic test for syphilis at some time during the course of their disease. Biologic false positive reactions occur less frequently in advanced tuberculosis, pneumoccocic pneumonia, bacterial endocarditis, chancroid, scarlet fever, measles, chicken pox, and rheumatoid arthritis. The existence of any of these diseases should warn the physician that the appearance of a positive serologic test may be due to their presence. In the absence of other evidence of syphilis, the physician should wait for a time to see if the positive serologic test will revert to negative.

5. *Laboratory Examinations.*—At this point the ordinary clinical laboratory may be able to give the physician certain additional help. There is no need to list in detail the types of tests that might be of value. The physician can readily determine what tests are appropriate for a given situation depending upon the patient's history and physical examination. For example, smears for malaria, heterophile agglutination, skin tests, or biopsies might be indicated by the circumstances.

6. *Spinal Fluid Examination.*—By the time this point is reached, differential diagnosis lies between asymptomatic neurosyphilis, latent syphilis, and a chronic biologic false positive reaction. In spite of recent serologic advances, we still feel that the spinal fluid should be examined. False positive reactions are very rare in spinal fluid. They do occur in certain acute meningeal types of infection which are easily recognized, but for practical purposes these are of no significance in the problem under consideration. If the patient has a positive test for reagin in the spinal fluid, it may be taken as conclusive evidence that the patient does indeed have syphilis. A second reason for the spinal fluid examination is that the consequences of untreated neurosyphilis are so serious that the physician is unwarranted in taking chances. A negative spinal fluid will rule out the possibility of asymptomatic neurosyphilis, and the physician will be faced with the differential diagnosis between latent syphilis and a chronic biologic false positive type of reaction. As a rule, if the physician is unable to obtain the special laboratory assistance outlined below, he is usually in a safe position to wait. Many of these biologic false positives will resolve themselves during the waiting period.

7. *Serologic Test with Treponemal Antigens.*—A new and powerful tool in the resolution of these problems was introduced by Nelson and Mayer's development of the Treponema pallidum immobilization (T.P.I.) test.[5] This test employs living pathogenic *Treponema pallidum* as the antigen. The antibody which this test measures is distinct from reagin, and it appears that true (as distinguished from technical) false positive T.P.I. tests are rare. Because of this, when we have reached this stage in our differential diagnosis, repeated positive T.P.I. tests represent a more reliable indication of a treponemal infection than repeated positive serologic tests for syphilis using lipoidal or cardiolipin antigens. It is emphasized that this is true in *this stage* of our differential diagnosis because blind reliance on the results of the T.P.I. test cannot be substituted for the steps already outlined without inviting possible error.

The best study to date on the usefulness of the T.P.I. test in the differential diagnosis of latent syphilis and chronic biologic false positive test is that of Mohr *et al.*,[3] which study was based primarily on patients in their private practice. There were 167 patients in whom all of the evidence from the history, physical examination, and other types of laboratory work indicated that the patient had latent syphilis. Among these 167 patients, 142 (85 per cent) were T.P.I. positive, while twenty-five (15 per cent) were T.P.I. negative. Among another group of 133 patients in whom all of the evidence pointed to the existence of a probable biologic false positive type of reaction, only twenty-two (16 per cent) were T.P.I. positive and 111 (84 per cent) were T.P.I. negative. Recognizing the possibility of clinical error, Mohr believed that where the T.P.I. test and the clinical test differed, the results probably represented an error in clinical judgment, rather than in the T.P.I. test. In groups as adequately studied as this, we would agree with the conclusion.

When the physician attempts to apply the T.P.I. test without this adequate examination, he is no longer on such certain ground. Neither the T.P.I. test nor any other laboratory test can make a clinical diagnosis; that rests with the physician's synthesis of all the available evidence. All that the T.P.I. test can do is measure the presence or absence of treponema immobilizing antibodies. The significance of the presence or absence of these antibodies must be evaluated in the light of the various clinical findings so far outlined.

Under what condition may the results of the T.P.I. test lead us astray? As we have indicated above, the presence of treponemal immobilizing antibodies as shown by the positive T.P.I. test rarely presents difficulties. If technical error is excluded by repetition of the T.P.I. test, a positive result nearly always indicates a past or present infection with one of the treponemal diseases. While this group of diseases include yaws, pinta, bejel, and syphilis, it is only the latter that needs to be considered in this area of the world. That false positive T.P.I. tests may occur is a possibility which cannot be ruled out at this stage of our knowledge. Indeed, certain unpublished evidence indicates that they may rarely occur.

The absence of treponemal antibodies as shown by a negative T.P.I. test, may present certain difficulties in interpretation. The difficulties arise from two sources. In the first place, as measured by most serologic standards, the T.P.I. test is a relatively insensitive test. Whether this is due to a low content of T.P.I. antibodies in the serum, or whether it is due to a relative insensitivity of the T.P.I. test, is not entirely clear at the moment. In the patient who has not had specific treatment for syphilis one usually does not encounter difficulty, since once the patient has gone beyond the stage of secondary syphilis, the titer of T.P.I. antibodies in the serum is sufficiently high that qualitative tests are nearly always positive.

The second source of difficulty is that treatment affects the formation of treponemal immobilizing antibodies. It is not now certain whether subcurative treatment may have an effect similar to that produced by adequate treatment. It is possible, but exceedingly hard to document, that subcurative treatment, when given early in the course of the disease, may reduce the antibody content of the serum to the point that the relatively insensitive T.P.I. test does not pick up antibodies, while the relatively more sensitive accepted serologic tests for syphilis do pick up such antibodies. It is for that reason that emphasis was placed on the obtaining of an adequate history. If a patient with a positive S.T.S. has had antibiotic therapy inadequate to cure a syphilitic infection and if the possibilities of exposure are such that the patient may have acquired syphilis, it is our own feeling that giving the patient adequate penicillin therapy represents a more prudent course than withholding treatment, even though the T.P.I. test may be negative at the time the physician sees the patient.

That the T.P.I. test has not been more widely employed and more generally made available is, in a large measure, due to the technical difficulties associated with the test. The reproducibility of the test results are poor in comparison with other serologic procedures. Such poor reproducibility does not condemn the research use of the test where adequate controls and frequent checks can be maintained. There are situations in which the T.P.I. test may be more accurate than the accepted tests even though the former may lack the precision of the latter procedure.

Because of the technical difficulties inherent in the T.P.I. test, a number of laboratories are seeking ways to employ treponemal antigens in a more convenient and a more precise way. One such effort has been reported from our laboratory by McLeod and Magnuson describing a treponemal agglutination test.[1] This test, still in the developmental stage, employs heat-killed pathogenic *Treponema pallidum* as the antigen. In our hands it has been far more reproducible, considerably more sensitive, and apparently as specific as the T.P.I. test. It is to be hoped that work along this and similar lines will soon give the physician access to treponemal antigen tests of greater specificity than the present serologic tests.

In the meantime, the practicing physician is much concerned about how frequently he is encountering real biologic false positive tests in his practice. Statements have been made that perhaps as high as 50 per cent of the patients in certain socio-economic groups who are found to have a positive serologic test do not have syphilis but actually have a biologic false positive reaction. Such statements must be interpreted with extreme caution. One must examine all such statements with the following points in mind: first, what was the economic, social, and racial composition of

the group studied; second, what serologic tests for syphilis were employed?

For example, in our examination of 363 patients admitted to the Durham Rapid Treatment Center in whom both the Kahn and VDRL tests were positive and in whom there was no clinical nor historical evidence of syphilis and in whom spinal fluid examination was negative, 97 per cent of the patients were T.P.I. positive. This group was predominantly Negro and primarily from the lower economic strata of an area in which syphilis is more prevalent than it is in Michigan. Therefore, we cannot apply directly our experience to your probable experience in Michigan. However, the recent studies reported by Miller[2] on experience in Canada may more nearly represent the type of population groups you have in Michigan. Miller found that 92 per cent of 327 patients in whom both the flocculation and complement fixation tests were positive had a positive T.P.I. test.

We suggest, therefore, that while there are situations in which the result of a treponemal test of one sort or another can be of tremendous assistance to the physician, if the physician will get repeated serologic tests for syphilis using either lipoidal or cardiolipin antigens and if he will do an adequate clinical workup, he can solve many of the apparent problems. In situations that he cannot resolve by usual means and where he is unable to obtain more specific tests with treponemal antigens, he will be less frequently in error if he considers these patients to have syphilis rather than biologic false positive tests.

Summary

Positive serologic tests for syphilis obtained with techniques using either lipoidal or cardiolipin antigens can never be ignored. The determination of the cause of positive S.T.S. in the patient requires careful clinical and laboratory study by the physician. The newer serologic developments can contribute valuable assistance, but serologic procedures alone cannot make a clinical diagnosis. While biologic false positive tests for syphilis represent an increasing problem, their prevalence in most types of practice has probably been overestimated. In the absence of treponemal tests, the physician will err less frequently if he considers the patient with a repeated positive S.T.S. to have syphilis rather than a biologic false positive test.

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A SEROLOGIST ABROAD

(Continued from Page 743)

them to sign a statement making the law greater than the king and thereby to establish fundamental personal liberties.

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The end result of this European trip cannot be summarized because it is impossible to evaluate fully the outcome of the interchange of ideas. We will therefore limit ourselves to a brief statement of practical results in extending the studies of universal serologic reactions in different peoples. Dr. Hermann Lehmann, of St. Bartholomew's Hospital, London, will send blood specimens which he will collect in future expeditions, to us in Ann Arbor. Dr. José Escobar, of Cali, Colombia, Professor Berndt Malmgren of Stockholm, Professor Olitzki of Jerusalem, Israel, and Dr. A. Alfredo Romanzi of Genoa, are planning to collaborate with us by establishing units for universal reaction studies in the peoples of their respective areas. A number of units of the International Division of Health of the U. S. Public Health Service will also collaborate with us in these studies.

Our sincere thanks to the Wenner-Gren Foundation for Anthropological Research for sponsoring this trip abroad, to the University of Michigan authorities for the leave of absence granted us, and to our many colleagues and friends abroad who made this trip a rich and memorable experience.

Treatment of Trichomonas Vaginalis Vaginitis with Desiccated Thyroid Gland

By Earl G. M. Krieg, M.D.

Detroit, Michigan

THESE observations were begun following a study[3] of 198 patients who had a lowered basal metabolic rate which simulated a surgical syndrome. In this group there were ten women afflicted with trichomonas vaginalis vaginitis who were relieved of symptoms by the administration of desiccated thyroid, and subsequent hanging-drop investigations showed a disappearance of the protozoan. In a subsequent series of forty cases, no local treatment was given except in four instances when the local irritation was unbearable. Only one local treatment was given each case. This group was observed for periods up to forty-eight months and there was no recurrence of the trichomonas infestation except in six cases in which thyroid therapy was discontinued against advice. Reinstitution of therapy relieved these six patients both subjectively and objectively. An example is found in Case 3.

Our cases have followed one of three behavior patterns. Group 1 was characterized by the prominence of signs associated with a lowered basal metabolic rate, that is, poor reserve, morning tiredness, irritability, backache, sensitivity to cold, bloating, obstipation, dryness of the skin and hair, apathy, change in weight, sleeplessness, et cetera, and the physical findings of a dry skin, particularly of hands, elbows, knees and hair, subnormal temperatures, bradycardia, lowered blood pressures and a basal metabolic rate which averaged minus 10.6. The local subjective symptoms of odor, irritation and stained clothing were negligible in this group but the objective signs of a yellow, frothy discharge, punctuate hemorrhages of the cervix and the vaginal vault were noted. A pH of six or more was obtained with phenylhydrazene paper and the trichomonads were observed in the hanging-drop preparation. An example is presented in Case 1.

Group 2 was characterized by prominent subjective signs of a lowered basal metabolism and equally prominent local vaginal signs and symptoms enumerated in Group 1. An illustrative example is Case 2.

Group 3 was characterized by poorly defined general symptoms and physical findings. The basal metabolic rate was lowered in most instances. Only vaginal symptoms and physical signs of trichomonas infestation were predominant and often comprised the sole complaint (Case 3).

Discussion

This small series of cases has offered interesting observations. All cases have been associated with the syndrome characteristic of a lowered basal metabolic rate of which there are many causes, a subject discussed by McKean.[4] All have responded so far to the administration of a thyroid preparation* but one would expect to encounter an occasional failure. Grenhill[2] described four "hypo states" affecting the vaginal tract. DeLee[1] mentioned several symptoms of a general character suggesting a "hypo state" but no one has previously pointed out that these "hypo states" represented a single condition.

Reliance on the basal metabolism rate alone for diagnosis may lead one to error, as we have pointed out in a previous publication.

Our local examinations have been limited to inspection, the hanging-drop and the pH determinations.

The amount of desiccated thyroid administered varied from one-half to four grains daily and the amount was determined emperically in slowly increasing dosage. The majority of patients have required 2 grains daily.

Relief of symptoms required patience and was obtained in four to twelve weeks. Local improvement usually appeared first. Resumption of the normal pH value was slow. Temporary failures were encountered when the drug was not given in sufficient amounts.

Summary

Trichomonas vaginalis vaginitis has been associated with a lowered basal metabolic rate in all of our cases. All have responded to adequate amounts of thyroid extract.

Further differential investigation is indicated.

Case Reports

Case 1.—A white woman, forty years of age, was seen on September 16, 1949. Her complaints included periods of amenorrhea followed by a severe menorrhagia, lower

*Thyrothiamine, Parke Davis Co.

abdominal pains and abdominal distention which were most marked on the left side, irregular periods of loss and gain in weight, poor physical reserve, extremely dry skin and hair, backache in right lumbar and dorsal regions, obstipation and prolonged spells of coryza and cough. Pertinent findings on physical examination revealed a very dry skin and tenderness without distention over the entire colon. Vaginal examination revealed a slight, yellow, frothy discharge. The cervix was eroded and the surrounding mucosa presented a mottled reddened appearance. The uterus was small, retroverted, retroflexed and contained a small myoma in the posterior wall.

Laboratory examinations revealed the chest x-rays to be normal; the hemoglobin was 72 per cent (Sahli); the basal metabolic rate was minus 9 per cent. The hanging-drop preparation of the vaginal discharge contained a few trichomonads and the phenylnitrozene paper registered pH6.

Treatment and progress: desiccated thyroid was administered slowly in increasing dosage to two grains daily. All subjective symptoms were relieved in a period of six weeks. The trichomonads were not found in the hanging-drop and the pH value of the secretion was still six. No further complaints were present two years later.

Case 2.—A white woman, thirty-eight years of age, presented the following complaints: (1) poor physical reserve, malaise upon arising, dryness of the hair and skin, weakness of the femoral muscles on exertion, irritability, sensitivity to cold temperatures and loss of twenty-five pounds of weight. All of these symptoms had progressed slowly in intensity for several years, and had become pronounced during the past eight months. (2) An irritating, yellow vaginal discharge, lower abdominal pains and bloating, irregular menstrual periods and hot flushes were present for a period of three months. She had had an appendectomy ten years before; an abortion nine years before and an oöphorocystectomy six years before.

Physical examination revealed a generally dry skin, redness and marked irritation of the vulva, a heavy yellow, frothy, clothes-staining vaginal discharge and the mucosa of the cervix and vaginal vault bled from punctuate areas when cleansed with absorbent cotton.

Laboratory: The hanging-drop revealed a few trichomonads. The basal metabolic rate was minus 15 per cent. Treatment consisted of a local application of a gentian violet solution. Desiccated thyroid was prescribed in increasing dosage to two grains. Three weeks later there was local and general improvement and the hanging-drop preparations were free of trichomonads. Seven weeks later she reported general improvement, the skin was less dry, no vaginal discharge. No flushes and again no trichomonads were found. Thirteen weeks and one year later there were no complaints.

Case 3.—A white woman, twenty years of age, was seen on September 8, 1948. She complained of a constant, severely irritating, copious, yellow discharge of three weeks' duration. Similar attacks of lesser degree had been present for three years.

Physical examination revealed the vulva skin to be reddened and a heavy, yellow, frothy, clothes-staining discharge which contained a few trichomonads. The cervical and surrounding vaginal mucosa contained punctuate areas of hemorrhage that bled when irritated by a cotton applicator. The secretion registered pH6 to phenylnitrozene indicator, and the basal metabolic rate was minus 9 per cent. Treatment consisted of a local application of 2 per cent gentian violet solution and desiccated thyroid in the amount of one and one-half grains daily was prescribed. Four months later, she reported no signs or symptoms for "several months." Ten months later, she noted a return of all local symptoms following voluntary discontinuance of thyroid extract. It was represcribed. Three weeks later, following menses, a severe flare-up required local relief. At examinations at six weks and three months after resumption of thyroid medication, there was no local symptoms and no trichomonads were found in the hanging-drop preparations.

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AMA NEWS NOTES

(Continued from Page 728)

Emphasizing modern, preventive philosophy, each program topic is dramatized by a cast of outstanding actors and then discussed by a physician distinguished in his particular field.

The following subjects are included—heart disease, cancer, arthritis, high blood pressure, mental health, surgical advances, rehibilitation, preparation for old age, endocrinology, diseases of the blood, general therapeutics, nutrition, and diabetes.

The "Thirty-five—Mid-point of Life!" series will be available in July for distribution to state and county medical societies for airing over local radio stations.

Pitfalls and Styles in Infant Feeding

By Donald J. Barnes, M.D.
Detroit, Michigan

WHEN FIRST asked to speak upon the well-worn topic of infant feeding to a group of people who are engaged in the very task of feeding babies every day of their professional lives and doing it, on the whole, successfully, my reaction was that any discussion I could offer would be an imposition on your time and good nature. Then it occurred to me that I might, perhaps, offer some of my impressions, gained over a considerable number of years, about certain trends or styles that have developed in infant feeding and recall to your minds some of the reasons, the objectives, and failures, we commonly have.

To discuss first things first, I would like to start with breast feeding of the newborn infant. Now everyone knows that there is an initial lag after birth before enough breast milk is produced to give the infant adequate amounts of fluid and food, and that there will be a resultant initial weight loss. The question arises as to whether we should jump into the breech and immediately order supplemental feedings, or perhaps even give interstitial fluids, to prevent that early weight loss. Babies are born with a greater amount of water in their tissues than they will have later on, may even be obviously edematous, and whatever risk there may be from allowing some dehydration weight loss to occur is probably more than offset by the good achieved by permitting rest and less handling after birth. In other words, this may be thought of as a physiologic "drying-out" period. To give saline solutions, as is too often done, is to invite further edema since the infant kidney does not appear to handle well the extra electrolyte thus added to the circulation. Let me say that this all applies with particular emphasis to the premature baby.

In most nurseries the infant regularly goes to breast during the first twenty-four hours after birth although if there is a question of birth injury he may well be kept in an incubator and given oxygen for a day or two, or even more, while thus living quietly in a warm humid atmosphere. Early administration of oxygen is one of our most useful procedures and should be used whenever in doubt. It doesn't, of course, take the place of being sure that the respiratory passages are clear so there is an adequate air-way, but it helps a great deal in avoiding anoxic damage to brain tissue, and toward helping injured brain cells recover.

The custom of nursing alternate breasts until the milk comes in is also an accepted and satisfactory practice, but beyond that time it is better to nurse both breasts each feeding. To postulate that one nursing every eight hours on alternate breasts will spare trauma to the nipples is to argue a fallacy. Half the nursing time on both breasts every four hours is not a longer nursing time per breast and most of the hard biting, sucking, and tugging goes on after the breast is emptied. So it would seem that a less vigorous and shorter nursing time on both breasts each feeding would be desirable. The mother is not physiologically divided into halves. Both breasts fill each time nursing stimulates one side and milk production depends on emptying the breasts. Leaving one breast full each time may lessen the chance of full milk production being attained.

A considerably more objectionable style in our present day hospital care of the newborn is the routine ordering of complementary formulae. Too often my obstetrical friends will write such feedings for the baby with their initial postpartum orders. It takes at least the length of time the average woman stays in the hospital, postpartum, to establish an opinion of her breast milk-producing potentialities. The baby is not apt to nurse vigorously unless he is hungry—and with easy-to-get food to satisfy his needs, from a complemental feeding, he will nearly always make poor breast feeding attempts. Thus it is wise to hold back on formulae during the neonatal period. Don't worry about an initial weight loss the first few days, but give breast feeding a chance.

We seem to be hearing less about the Cornelian Corner the last year or so—a plan which originally started with the advocacy of total care of the newborn infant and breast feeding by all mothers. A group of serious-minded pediatricians fathered this movement largely because they recognized that formula feeding was, in some areas, practically crowding out breast feeding, and their recognition of its value to both mother and child. Then it was siezed upon by eager psychiatrists

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who have conjured up a variety of phobias and traumatizing sequelae that will befall children, and parents, who don't achieve breast feeding. And now, according to some of our psychiatric friends a child's future seems to depend almost entirely on how he is suckled. Shades of Romulus and Remus! Now, we are all in favor of breast feeding just as we are all against sin. We recognize breast milk as the most desirable food for the normal full-term baby, but to hold that upon this primarily hinges not only the baby's physical well-being but also his emotional, and even spiritual, life is hard to accept. There is a lack of evidence that the breast-fed infant is superior physically to the properly formula-fed infant. There also must be at least a number of other factors which involve his emotional development. First, the woman who is a good "breast feeder" is nearly always a physically adequate, emotionally calm, pleasant, happy, secure individual who has a normal desire to enjoy to the fullest degree the achievement of motherhood by nursing her infant —and she endows her baby through inheritance with many of her good qualities. But to attempt to force a young mother, herself emotionally unstable and unable to produce adequate breast milk, to breast feed a baby is cruel and inhuman—and sheer nonsense. The claim that she will transmit greater security, greater love and affection, and develop greater feelings of adequacy herself in dealing with her infant, and later her child, by imposing such a frightening, painful and traumatizing experience on her is beyond my understanding. Logically, just the reverse should happen, and within the past few months I heard a good psychiatrist ascribe some emotional problems in a preschool child to the fact that the mother was forced to breast feed the baby, with its attendant feelings of pain, frustration and unhappiness as being at least an important factor in the poor child-parent relationship. Let me repeat, I am in favor of breast feeding whenever feasible, but when I consider the problem of bottle versus breast I think of an esteemed colleague of mine, who after a Cornelian Corner meeting, remarked that he still believed he could "make a baby just as happy with a nice warm bottle of milk as any mother could," but on second thought "maybe I would have to take my shirt off when I fed him."

If breast feeding is to be used as a safety factor for hospitalized maternity patients, the situation becomes somewhat different. Ideally with plenty of skilled nurse-attendants, adequate room and, again, a mother who co-operates willingly, rooming-in should help decrease possible exposure to nursery infections. Limiting factors that are genuine and important are need for adequate personnel and the higher cost involved with more space used and more people caring for the patients. A common practice now is to take the baby from the mother's room to a main nursery during the night. It would seem that this only increases previously existing physical hazards and certainly is not "total care of the newborn infant," although it does permit the new mother to learn about the care of her baby while in the hospital—a desirable thing. The risk of so-called newborn epidemic diarrhea appears to have been materially lessened since autoclaving of all water and formulae has become such a standard practice—and since more attention is being paid to nursery antisepsis and cleanliness.

Vomiting is never a sign in a baby which may be disregarded. It may be inconsequential but can never be assumed to be so just because a baby is young and prone to vomit easily, and often for minor causes. Sometimes feedings are given too rapidly, some are too concentrated for a given infant, or they may be started too soon after birth. Withholding of a feeding or two, diluting the formula, slower feeding or lap feeding which permits more ready eructation of swallowed air, and being sure nipple holes are adequate are often helpful with the formula fed. Sometimes administration of 10 or 15 drops of Elixir Phenobarbital before feeding will stop vomiting in the so-called "hypertonic" type of infant—and may be used with discretion even in the first week or two of life.

One must always remember that infections, or other physical abnormalities may first manifest themselves by the occurrence of vomiting. One of the types I often see is the progressively increasing vomiting in a baby who has gotten along well for the first two or three weeks. This should always make one suspicious of congenital hypertrophic pyloric stenosis. Careful examination and observation will develop the other signs—of peristaltic waves across the abdomen, weight loss, infrequent and scanty stools and perhaps an olive-sized tumor palpable in the right upper quadrant. All of these signs are progressive and the error of assuming that the trouble is due to the formula is made all too often. Change after change in the

formula is made, while the baby becomes rapidly worse. A Rammstedt pyloroplasty is the choice of treatment—a wonderful operation which should not be too long delayed. Formula change is definitely not the answer. Suspect any infant, who is otherwise well but who can't tolerate ordinary milk mixtures of having such an obstructive lesion—and don't fuss too long with thickened feedings.

Whenever an infant just fails to gain and loses appetite, though food offered is adequate, one should look for hidden infection or anemia. Urinary infections are perhaps the most common, particularly in the female infant. Tuberculosis should be ruled out with a Mantoux or a Vollmer Patch Test, and don't neglect to make a Kahn test. If an infant has had recurrent acute upper respiratory infections, the ethmoids or ears may be suspect—though the symptoms and signs here are usually fairly acute. At any rate, one should look diligently for all sources of infection.

While the newborn generally has a higher than average hemoglobin and red blood cell count, the baby often develops some anemia during his first six months of life. A hemoglobin below 75 per cent certainly calls for the administration of a simple iron preparation. Infant blood levels should be regularly checked and, lacking facilities for this, iron should be prescribed regularly prophylactically. It often makes a great difference in gain and appetite, and probably in resistance to infection.

There is at present the style of using highly concentrated milk feedings. We agree that many normal infants can get along on whole milk, or evaporated milk feedings restored to whole milk volume. And may I pause here to say that to the ordinary 13 fluid ounce can of evaporated milk should be added 21 ounces of water to make it isocaloric with whole cow's milk. To use a can of milk and a can of water is further over-concentration.

There is some hazard to the use of concentrated milk feedings during the first few weeks of life since an increased load is put upon the kidneys. A quart of milk contains approximately 1.2 gm. of calcium phosphate. This high concentration of phosphate, over twice the amount present in breast milk, often leads to some degree of phosphatemia which, if sufficient, may lead to increased loss of calcium with the development of convulsive seizures—tetany of the newborn. The large amounts of sodium chloride present in cow's milk also represent in the average day's feeding about the maximum the newborn's kidney can handle successfully. Any increase of salt in accessory foods or fluids may quite well exceed the baby's capacity to adequately excrete salt and result in water retention. Breast feeding, of course, avoids this because of its lesser amount of phosphate, as does the use of the usual cow's milk modifications. To some degree, the same can be said of an oversupply of protein. Storage of nitrogen is helped only up to a certain point, beyond which it results in appetite loss and signs of protein intoxication. Here again, this is avoided with proper milk dilutions. An ounce and one-half of cow's milk per pound of body weight gives the young infant all the protein he needs for good nutrition. A breast-fed baby may need 2 or 2½ ounces per pound of body weight.

Another practice which has become popular in some medical circles is the introduction of solid foods at an extremely early age. I have had patients in my office who by six or seven weeks of age were getting cereals, vegetables, fruits and meats—proudly announced by the mothers, as though they were particularly advanced in their methods of feeding. I think we might ask ourselves what we hope to attain by such procedures. After all, milk is the one indispensable food during infancy. It supplies proper protein, proper minerals and with the addition of vitamins and perhaps iron, completely meets the baby's nutritional requirements. So we add cereal at two or three weeks while the infant still doesn't have enzymes to digest such quantities of starch. We add vegetables and so on—and the mother must take an extra two or three hours a day preparing and feeding accessory foods—to no useful purpose. After all, what we want chiefly is to introduce these changes in taste and texture while the baby is still young enough to accept them without too much resistance. Let's not harry and overwork a busy young mother by making, without good reason, extra work for her. The third or even fourth month is soon enough for addition of solid foods. We might do well to remember that "change is not always progress," and while the ordinarily robust normal baby will generally be unharmed by such a procedure, I occasionally see infants who have chronic digestive disturbances which may be traceable to such a regimen. What is the purpose and is there gain from this? I suspect it to be a fad, and one which I have seen do

definite harm. Some babies will get so many calories from solid foods that they will take less than the required amount of milk with consequent nutritional damage. Nature will guide a baby to take about the correct number of calories per day, and if too many are taken as solid food then too few will be taken as milk. I recently saw a baby who was given solid foods early, who was on a so-called self-demand schedule, and who at four months of age was taking three feedings a day. He was getting less than an ounce of milk per pound of body weight per day, but was fat and happy—and his appetite satisfied chiefly with cereal.

Self-demand feeding schedules are proper if guided to some reasonable routine regularity, and supervised intelligently. We can recognize the benefits of the flexibility such feeding plans offer, particularly during the early months, without at the same time discarding what we know about food requirements.

Having recognized the vitamins, and the need for supplementing natural sources of some of these, we have been besieged by eager salesmen to give more and more vitamins to all of our patients, large and small. Excepting vitamins C and D an infant on a reasonably adequate diet must only very rarely need added vitamins. Additional ascorbic acid, vitamin C, is needed—25 to 50 mgm. per day either as orange juice or in a concentrate. Vitamin D is not found in anything approaching adequate amounts in natural foods, so vitamin D is given as cod liver oil or as a concentrate to control and prevent rickets. For a normal full-term baby 400 units per day are probably optimum, though 800 units per day are thought by some to be preferable. It is also very true that full amounts of vitamin D will not prevent the early changes associated with rickets in many very rapidly growing infants during the first three months of life. However, the disease comes under control easily and heals itself as growth slows down. Certainly, ascorbic acid is necessary to prevent scurvy and help in the metabolism of certain amino acids. The premature infant properly should be given about twice the amount of vitamin C and vitamin D recommended for the full-term baby for the first two or three months of life—then as his growth pattern becomes that of the full-term baby the regular amount continued. One must remember always that with the use of vitamin D concentrates too much vitamin D (over 2000 units per day) may easily be given, an amount which promotes a loss of calcium and demineralization of bone. It is easy to exceed the proper amount of vitamin D by the use of these concentrates and the mother should be cautioned not to increase dosage on her own responsibility.

Summary

1. Breast feeding should be used by all means, if possible without physical or emotional harm to mother and infant.

2. Diluted cow's milk formulae are recommended—after a reasonable attempt at breast feeding—diluted to avoid overloading the baby with mineral salts and to avoid hypocalcemia, hyperphosphatemia and tetany neonatorum.

3. There should be reasonable safeguarding of the mother's time and strength by giving accessory foods at the proper time, three to four months of age.

4. Self-demand schedules require more detailed supervision than previous methods of care. The schedule should not end with a fat, cereal fed baby who failed to get enough milk because his parents or physician were neglectful.

5. The belief that vomiting and failure to gain are due only to improper formula composition is questioned. One should look for pathologic conditions such as a pyloric stenosis, or other obstructive phenomena, or hidden infection, or anemia.

6. One should not overdose with vitamin D—it may cause loss of calcium with too much vitamin D. Scurvy will result from too little vitamin C, and, in the premature, failure to gain occurs, with deficient amino-acid metabolism, from too little vitamin C.

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Some Comments on Commitment to State Hospitals

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THIS ARTICLE is written in the light of certain experiences with patients hospitalized in state hospitals in Michigan, and as a result of having had a number of informal discussions with physicians who have had to do with some patients before their hospitalization. The idea of writing a few words of explanation and clarification has occurred because in a rather large number of instances the fact has emerged that although the patient's private physician felt a sojourn in a state hospital might help the patient, he has indicated that he has been somewhat uncertain what would be in store for the patient, subject to various doubts in connection with the commitment proceedings, and uncertain about what he should tell relatives.

These words are accordingly being set forth for the information of physicians, busy with other things, who still deal at times with patients in need of hospitalization for mental illness. While there seems to be considerable risk that many of the readers will find nothing here that they do not already know well, it still seems desirable to write something inasmuch as it is important that the committing physician know the general situation. His dealings with the patient and his relatives, prior to hospitalization, are apt to have a significant effect on the attitudes these persons have toward hospitalization, and this in turn may have an effect of some importance on the ease or difficulty of subsequent management of the patient.

It would be naïve indeed to suppose that the only difficulty in the way in this matter of hospitalization is that sometimes the patient's physician is not in possession of sufficient information. However, in spite of the fact that many other elements are present in the situation, it does seem that in some instances the examining physician would have been helped by some increased factual knowledge about the nature of the treatment the patient would receive as well as some other things that will be mentioned. Both patients and their relatives often seem fearful about the hospital when they are in reality afraid of their own projected hostility, and giving factual information may in some measure alleviate their anxiety and interrupt the development of unfavorable attitudes. It is to provide factual information about a few aspects of the problem that the immediately following paragraphs are written.

Perhaps some things about organic brain disease may well be mentioned first. There are some points that do not always seem clear, even in the instances of these conditions, for various reasons. When a patient with Huntington's chorea is admitted to the hospital and follows a progressive and more or less accurately predictable course into dementia and death, or a person with general paresis is admitted and, as sometimes happens, recovers to a considerable extent after treatment, this seems understandable. When a patient with arteriosclerotic brain disease enters the hospital and then subsequently goes home it can give rise to some perplexity. Even though the subsidence of focal edema and the recovery of functionally impaired nerve cells may account for a good deal, it is evident at times that it does not account for everything. The patient has a condition for which there is supposed to be no effective treatment and yet he looks as though he has improved, even though he may be far from entirely well. This phenomenon is occasionally quite striking in certain such patients who have been very difficult to manage at home. The apparent anomaly of the patient who improves when he seems to have an untreatable condition may be partially explained however, if one considers that there are also psychological factors in the illness and that while the disease of the brain may not be subject to much, if any, improvement, the fact remains that in a certain limited measure the patient's reaction to the illness psychologically may be modifiable. This makes it possible for the patient to improve even though it may not be possible to treat his brain disease as such.

Since such patients with organic brain disease of an ultimately progressive nature do at times mobilize various resources not necessarily obvious on superficial inspection, what is told to relatives becomes important. If the relatives are unaware that the patient may improve enough to be out of the hospital for a time, they are very apt to leave him there, even if he improves. The physician has assuaged any feelings of guilt by giving a hopeless prognosis and if the patient does now improve it may be very hard to persuade the relatives that he should go home for a time. Since the patient

is not usually well enough to leave the hospital entirely on his own, he must necessarily stay unless his relatives or friends will help him. It should be noted that some patients with organic brain disease leave the hospital improved, remain out of it some time and succumb to some other infirmity without ever having had to return. It seems better that aged persons should spend their last years at home if this is possible.

Another topic of some importance concerns a variety of treatment seldom applied to other than the mentally ill, of which electroshock is perhaps the most frequently encountered example. This category of treatment involves the application of some sort of therapy which is obviously intended to have more or less profound physical or physiological effects on the patient. It is a source of some confusion that these sorts of treatments are most often applied to patients who have conditions in which there is no known structural pathology. It seems anomalous to apply a sort of treatment that modifies something physical or physiological when it is not demonstrable that there is any such thing in need of modification, and when there is no consensus of opinion as to how the treatment works. The fact is that there is no real unanimity of opinion as to why electroshock helps in certain conditions. There is a lot of accumulated factual material about it but this is not sufficient to explain a great deal as yet. It is indeed a question whether the patient gets better because of anything that happens to the brain as such, or because of the emotional significance this dramatic and spectactular treatment assumes for him, or because of both. On the other hand, it is an observable fact that certain conditions, particularly severe, psychotic depressions often are altered materially and favorably by such management. Much the same things could be said of other sorts of treatments in the group of techniques in question, although some are in vogue of which it might be questioned whether there is any beneficial effect at all that might not be better obtained in other ways. It follows in any event that electroshock and other sorts of treatment in this group are in actuality given for no good reason other than that they work. This is a valid reason to employ them, of course.

These things have been mentioned partly to provide information useful in talking to patients and their relatives. It is sometimes quite trying when patients are admitted with some understanding a more or less magical cure by electroshock is to be forthcoming. This is so, not only because of the disappointment attendant on learning the truth, but also because sometimes one then has to deal with other feelings generated. When patients are told they need electroshock, the hospital physician sometimes is forced to disagree with this conclusion. When that happens the patient and his relatives for various reasons may have to maintain the conviction that the treatment is really available and will do all they have been led to believe but that it is being withheld for some mysterious reason. While this is an unreasonable attitude, it can occur and needs to be discouraged at the outset. Moreover, it is no more bizarre or unusual than some of the unrealistic things often expected of physicians in branches of medicine other than psychiatry.

Having thus written of some points of interest, even if not having by any means disposed of them, it may be helpful to turn to some things having to do with the psychology of the patient rather than his physiological and organic pathology if any is present. Although many generalities of medical psychology are now widely known, the application of them is highly individual. In state hospitals as elsewhere, there has been a trend toward approaching the problems of the patient from the point of view that sees him as involved in an illness best understood by seeing particularly its individual pecularities rather than understanding it merely by applying previously known generalities. This sort of approach has undoubtedly been fruitful, but it imposes the unfortunate requirement that the individual patient be given a great deal of someone's time. The requirement is unfortunate because there are not such large numbers of man hours available. The supply of physicians is certainly so limited and the number of patients so large that all the patients cannot have an optimum amount of time. In addition to this, it is also true that the very nature of the illness of many patients makes the study and management of the psychology of the conditions not merely difficult, but, at times, impossible except to a very limited extent. What can be done in each instance is further circumscribed by the limitations of the physician, of course, just as in any other branch of medical treatment. A patient coming into a state hospital may get a good deal of individual treatment from a physician, but he also may not get it, particularly if it would be of uncertain

value, because the physician has only a limited amount of time. This means in general, that the patient most often gets something else. As has been noted, he often seems to improve in the hospital setting and there is evidence to suggest that in some instances this wouldn't have occurred at home.

This is a result of several things. It must be noted that the goal of treatment is something less than what is often pictured, since in any event, even granted an optimum number of physicians most state hospital patients are not suitable candidates for the sort of treatment that attempts to help by an expensive uncovering of unconscious processes and conflicts, except perhaps in the hands of a very few persons possessed of most unusual capabilities. The treatment is directed rather at a strengthening of the defenses at hand in the hope that the patient can effect an adjustment again at least as good as that he made before the overt illness occurred. Even if the previous situation left some things to be desired, it was still usually better than the current one in which the patient is confined to the hospital.

Standing in the service of the patient's tendencies to recollect his weakened capacities and regain his ability to act in some accordance with reality are many things contained in the general structure and atmosphere of the hospital. There are repeated interpretations of the actual situation by the personnel on the wards and by the various persons with whom the patient is in contact in recreational and occupational therapy, in his meetings with social workers, psychologists and others. Many of the beneficial things that are done for and said to the patient are said and done quite spontaneously and automatically on the basis of accumulated experience. This is particularly so in the instance of the psychiatric aides who have had a good deal of experience but no formal training of such an extent as to give an academic insight into psycho-pathology. The fact remains that what is said and done is nonetheless efficacious in many instances. Out of what happens to him in the hospital, the patient often gets sufficient fortification of his resources to get better, at least in a certain measure. This could be a subject for long discussion and much investigation beyond what has been done already but such a digression is beyond the scope of this brief paper. The point is that the committing physician should realize and, if necessary, tell patients and their relatives that at times hospitalization is of help without the application of some highly specific therapy. Perhaps it will be disturbing to some that in most instances it is necessary to leave the patient still ill but possessed of an ability to get along. However, being unable to achieve perfection, one must do what one can. Moreover, in many instances, the patient is quite satisfied to accept his situation bith both its satisfactions and disadvantages and would not like to be any different, or rather perhaps finds the prospect of looking into the possibilities so frightening that he avoids even mentioning it. The physician would like to see something better than this patchwork done, but he must usually be content with it perforce. In addition, it is notable that while families of patients in state hospitals often assert that they want the patient well, the fact is that they do not mean by this that they would like to see a state of good adjustment such as the physician visualizes, with its attendant changes in the attitudes and behavior of the patient. Often they mean they want him as he was before the overt disturbance that led to hospitalization. This was usually a condition far from theoretical perfection. This may have something to do with the fact that while it is often possible to imagine a change in the patient's environment that would help, it much less often proves possible to effect it if the co-operation of persons to whom he is a significant figure is needed. They may show a great resistance to being changed or making changes for various reasons, often unclear to themselves. At times, the only major changes possible may be those not requiring the co-operation of close relatives. There is no intent to say the help of interested relatives cannot be of inestimable value; just an intent to indicate it cannot always be obtained.

It will be seen from this that the state hospital has a modest goal for most patients. That the goal has to be modest, partly because of limitations in the amount of personnel available, is unfortunate but true, in many instances. Probably the most remarkable thing about the whole matter of state hospital management of psychotic patients is that such large numbers prove to have capacities sufficient for social recovery with only a little help, so long as the help is given appropriately and with such avoidance of errors as our present state of knowledge makes possible.

While it is to be hoped these remarks will be of help, it will be noted that it was said that lack of information about the nature of hospitalization is not the only difficulty. It would seem from the experience of the writer that in many instances the manner of handling the business of commitment could have been improved upon in some ways other than the ones implied above. It, therefore, is desirable to add a few comments about the technique of managing patients examined by physicians for commitment. Of course, the legal machinery for commitment might conceivably be improved upon too, but that is not the subject under discussion.

To illustrate the point that is being made, it may be noted that not uncommonly patients whose disturbances of thinking inclines them to a peculiar and largely unfounded suspiciousness, arrive at the hospital expressing the idea that they have been committed for obscure and nefarious reasons other than their quite evident illnesses. While this delusion is a product of the illness and while one of its functions in protecting the patient from a too damaging loss of self-esteem is evident, at times it still seems it has been somewhat encouraged by the manner in which the commitment was carried out. For it often eventuates that a delusional interpretation of the proceedings was somewhat facilitated because they were carried out without the patient being made cognizant of what was going on. It is much easier to make a fanciful and erroneous interpretation of what one does not understand than to do this with a situation about which one knows a good deal. While this is no explanation of the reasons why such symptoms have had to exist, it illustrates that events may have such an effect on the patient's thinking that subsequent hospital management is made more difficult. It would seem that in some instances the patient is done a poor service merely in that he is not sufficiently informed by the examining physician. He is not clearly told why he is being examined and he is not told what is the conclusion reached. His suspicions that he isn't being told about something that is going on and concerns him are in this instance, correct. It is true that a lengthy explanation of the illness may be worse than useless, but a simple literal explanation may often help the patient.

It is imaginable that there could be a tendency to object to this thinking on the basis that the patient will not accept the idea of hospitalization or will not understand it, or even will be angry with the physician. There is some merit in this conclusion in a few instances. Some patients may be so unremittingly hostile that nothing said to them would be acceptable, and some may be too confused to understand entirely. However, while what is said must be chosen with good judgment and put in very simple language at times, usually patients will understand if only some literal explanation is given. It is particularly important that the problems of communicating with psychotic patients, not be confused in the mind of the examiner with those of communicating with mentally defective patients. It is also important to note that one should not take the patient's failure to respond appropriately to indicate non-comprehension. Some catatonic patients have an excellent recall of what was said to them and about them when they appeared stuporous.

All this need not be confused with a need for an explanation of the mechanisms of the illness themselves, any more than in the instance of a patient suffering with pneumonia it would seem to be necessary to give a dissertation on the details of his pulmonary pathology. Quite commonly a patient will understand even though he must disagree with what is said. Patients are quite often willing to agree that the physician has to express his honest opinion in the situation and may remain amicable and even quite co-operative while disagreeing with him. It is well to bear in mind that many patients find themselves reassured at the prospect of hospitalization, which seems to offer some protection against the things which they fear in themselves. In any event, it is well that the patient not be treated as though he is demented and cannot comprehend what is going on. Such an attitude is apt to be frightening and the resultant behavior is apt to be hostile. It should also be noted that an unwarranted optimism about the duration of hospitalization or the efficacy of treatment is apt to lead both distrustfulness on the part of the quite rightly sceptical patient and to disappointment for the patient's relatives.

What goes before has been written with the attitude that the committing physician is himself sure as to how he should proceed. There are, of course, instances where he has to seek the help of someone with more specialized experience and training but it does seem worth noting that patients

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William J. Stapleton, Jr.

A *Tribute*

By Senator Homer Ferguson
Washington, D. C.

WE ARE here tonight to pay tribute to a modest, unassuming yet great citizen of the State of Michigan. I honor myself in paying tribute to him, for much of his greatness lies in his capacity to be first of all a kindly and sympathetic human being. Beyond this, he has accomplished a great deal. He has been ever alert to his responsibilities as a citizen. His profession of medicine is richer by his contributions to its ethical standards, his teachings, and by his great general cultural influence. As my colleague, in his second profession, law, I salute him for his profound understanding of medical legal affairs and his efforts to serve the ends of justice.

Dr. Stapleton has lived through a third of the life of this great city. Mass production with its technical and human problems are not strangers to him. He has met these problems with understanding and sympathy, knowing that the mind of man can and will cope with his fate. His devotion to history throughout his life has given him a pattern of conduct that has inspired and will continue to give hope to many.

I have read of the accomplishments of Dr. William J. Stapleton, of how he was graduated in medicine in 1900, became a registered pharmacist in 1902, and earned a degree in law in 1907. His career for the past half century has been devoted to teaching, to the practice of medicine and to professional and community service. His cultural and literary accomplishments are of high order. His life has been one of service to his fellow man. Men have placed their trust and confidence in his integrity and he has been asked repeatedly to guide them in their affairs. Men have honored him for his skilled statesmanship in medical and community affairs.

In the life of Dr. Stapleton we see the benefits that our American way of life has to offer and the rewards that it can return—the opportunity for the individual to develop to his greatest capacity.

In fact, Dr. Stapleton's life, like the profession he serves, typifies the very root of our country's strength—that freedom of the individual to make his own choice of action, subject only to the limits he sets for himself, in relation to his family, his neighbors and his colleagues.

Our society and our nation can only stagnate and wither if that freedom is shackled by a paternalistic authority, no matter how noble the motives which might tend to guide or force American enterprise into a regimented pattern of behavior. The human mind and soul rebel against coercion, for life itself is lost without the freedom to move and grow through voluntary choice.

No law can successfully prohibit cancer. No law can assure the eradication of heart disease. No government edict can guarantee the discovery of a cure for multiple sclerosis by shackling doctors to a laboratory bench and ordering them to come up with a remedy within a given period.

Discoverics of the cause of malaria, of typhoid fever, of pellagra, have come from the voluntary efforts of free men, who for the very reason they were free, could give their enthusiastic, undivided attention to the self-imposed goals they had set.

Medicine's code of freedom has three positive commandments:

1. To preserve the patient's freedom to choose his physician,

2. To withstand interference by any third party in the intimatc professional relation between doctor and patient, and,

3. To practice the best modern medicine in the service of humanity.

Because the medical profession is free in the United States, it resists all efforts toward coercion. Because the medical profession is free, it carries its own goals and its own capacity for growth. Because the medical profession is free in the United States it has taken the lead in establishing partnerships with other professions and civic groups in advancing medical knowledge. It is in the vanguard of efforts to improve the availability and quality of medical personnel and institutions and to bring the best of American medicine within the reach of all who want and need it. Because the medical profession is free it has voluntarily assumed the responsibilities that freedom entails. Dr. Stapleton's life is a complete recognition of these facts.

Remarks at the Testimonial Banquet honoring Dr. William J. Stapleton, Jr., as Michigan's Foremost Family Physician of the Year, Sheraton-Cadillac Hotel, Detroit, Michigan, May 11, 1954.

President Eisenhower's health program, too, recognizes the vital importance of that freedom for the health and welfare of the people of the United States. The program recognizes that Federal action in the field of health and welfare must be a form of voluntary partnership, not of dictatorship, coercion, or direction.

Some of the present curbs on a doctor's freedom to practice good medicine arise from a lack of hospitals, nursing homes, convalescent homes, diagnostic laboratories in the community. The President's recommendations for legislation extending the Hospital Survey and Construction Act is a means of aiding the States and communities to establish these facilities where they are lacking. I am pleased to co-sponsor that legislation.

Physicians everywhere in the Nation will recognize that Federal, State, and local partnership in assuring the availability of facilities for the chronically ill, for example, will enhance—not detract—from their freedom to practice good medicine.

Another curb—if the word may be used in that sense—on the freedom of medicine is a lack of knowledge with respect to the cause and cure of mental and emotional disorders, of high blood pressure, of cancer, and others.

The President's health program calls for continued federal help in removing those curbs. Through research in the Public Health Service's National Institutes of Health, private physicians and federal scientists are working in an inspiring form of voluntary partnership in breaking down many of the barriers of ignorance.

Moreover, federal financial aid to research in medical schools and other institutions, and for fellowships and training, brings medical and allied research throughout the United States into a close but voluntary and spontaneous working relationship. It provides additional tools for the practicing doctor.

For many years, through grants-in-aid to the States, the Federal Government has helped states and localities to make this country a healthier and safer place in which to live, by reducing the danger of spread of disease through environmental sanitation, through measures for maternal and child health, through reduction of occupational hazards, through casefinding and prevention programs for communicable disease. These grants-in-aid programs, however, in many instances did curb the initiative and flexibility of the states in dealing with their own health problems.

The President's suggestions for improving these programs assure the States more freedom than before in strengthening their health programs, and in exercising their own initiative and responsibility in the use of federal funds. This new approach will strengthen also the freedom and responsibility of the medical profession in its work with local health departments and open new vistas and opportunities for medical leadership in meeting the health needs of the communities which they serve.

The people of the United States with leadership and example such as that provided by Dr. Stapleton and under a free system of medicine, have gone a long way toward reducing the magnitude and unpredictability of the costs of illness. Voluntary insurance against these costs has been possible through the co-operation of insurance companies, voluntary associations, employers, labor unions, hospitals, and, far from least—the medical societies.

The President's proposal for a limited federal reinsurance service offers a new form of partnership in meeting the financial problems of medical care—the problems that are serious to both the provider and recipient of medical services.

Through a reinsurance plan, more people of the United States who are willing and able to include health insurance premiums as part of their family budgets can be brought into the voluntary system.

The Federal Government, by helping to assess actuarial risks and by standing ready to share in assuming those risks will, in a sense, be a limited partner of the insurance carriers in extending health insurance benefits to many of those who are now inadequately protected against the costs of serious illness.

It should be clearly understood that this proposal is rooted in the American tradition of freedom in medical practice. If this proposal were adopted:

Participation would be voluntary for the insurance carrier

Participation would be voluntary for the policy holder

The doctor-patient relationship would not be affected

The Federal role would be narrowly limited and confined.

In a word, the proposal is completely consistent with this administration's firm conviction that complete freedom of the individual in the medical

field must be preserved. Action of this sort—a positive program to encourage the expansion of VOLUNTARY health insurance—is the best insurance against the threat of COMPULSORY action in this field.

Just as lack of adequate hospitals, nursing and convalescent homes, and diagnostic facilities are present curbs on the freedom to practice good medicine, so also is the lack of completely adequate resources of rehabilitating the disabled. A fifth and exceedingly important part of the President's health proposal would greatly increase the nation's potential for restoring helpless people to happy and useful lives. If these proposals are adopted some 660,000 persons could be rehabilitated in the next five years.

The voluntary way of approaching our health problems is the sure way because it is the truly free and democratic way. The medical profession recognizes the necessity for freedom and has set a high standard in protecting that freedom. I believe it will be among the first to welcome the new climate in which the federal role in promoting health is dedicated to means of broadening and strengthening the freedom of medical practice.

The efforts of the Federal Government to bring about a greater freedom in the practice of medicine is just one phase of the over-riding struggle to broaden the frontiers of freedom in every direction.

In this great struggle, we are unceasingly opposed by the forces of God-less communism. As Doctor Stapleton provides us with an example of the benefits of a free medicine, so also does he inspire us as to the benefits of freedom and liberty on every front.

We shall be successful in this struggle only if we are able to satisfy and inspire the basic spiritual needs of man. Supplying the basic material needs is not enough. The belief that material things are of supreme value has become a vast international conspiracy.

Surely the goal of life is far more than material advance. It must be the triumph of spirit over matter, and of love and liberty over force and violence. The spiritual hungers are as real as the physical and we who are free to follow the great teachers, free to believe and free to speak, are the ones who can satisfy them.

The communist world is calling to book the economic and political system by which we have prospered. Our ethical practice is in question. Our beliefs in God and individual dignity are objects of scorn. We are being asked to defend ourselves and free peoples generally by the devising of and production of increasingly deadly weapons.

But challenge and insecurity are not strangers to Americans. We have ample lessons from history that man can live dangerously and like it but in this insecurity and danger he must see a stimulus and not an intolerable imposition.

These issues may all seem to be remote from you as doctors and disassociated from the importance of this happy occasion. Let me assure you they are not.

The man we honor has shown his greatest human qualities in his unrestricted and non-conformist growth as an individual. It is certain that none of his development was easy and without great effort. By his perseverance and by his unremitting toil he has been able to accomplish the things for which we honor him.

This has been made possible by two things: the medium in which he grew, and the nourishment he was able to derive from it and use with intelligence and wisdom. From 1876 until now, Detroit has been no medical paradise.

Let us then guard carefully those things which permit the growth of our great men. Let us see to it that all have opportunity to develop their talents and to profit by those talents insofar as they are able without damaging their fellow man and society. Let us interest ourselves as professional men in the welfare of our community, state and Nation.

As educated men it is our responsibility to provide leadership in professional, political and cultural affairs. This is something too readily neglected by doctors under the plea that the press of their professional affairs is too great.

These things are all a part of the freedoms which our own form of government guarantees yet which would be denied us under any kind of totalitarian or authoritarian regime. We believe that it is under these circumstances that man can grow to full stature and do the best of which he is capable.

It is under these circumstances that he can receive adequate and stimulating reward for his efforts, and can exercise fully his skills and judgment. It is under these circumstances that man rises to that dignity which is his God-given right.

Editorial

NEEDED NATIONAL LEGISLATION

MANY TIMES the medical profession has been accused of being "against" whatever legislation was proposed in the Federal Congress. This Editor early recognized that criticism; he began offering suggestions of something that could and should be done. It was then the proper thing to "oppose" the Wagner-Murray-Dingell bills, which were primarily trained toward the socialization of medicine. We suggested some legislation which would be beneficial. We were "for" something, instead of "against." That attitude became adopted more generally, and for many years the medical profession has had a positive program. Lately, it is true, we have been opposed to certain features of the Social Security amendments. We did succeed in removing the medical profession from the list of compulsorily covered new "beneficiaries."

Congress is still in session. The Senate will shortly have a "go" at the Social Security amendments, and, who knows, may replace the medical group on that list. Whatever becomes of the proposed amendments, there is one change which should be made in simple justice. The restriction on persons over sixty-five earning more than $75 per month should be removed. Medical men do not retire at that age and therefore could not benefit from the tax which they would have been compelled to pay. The same holds for law, dentistry, architecture, and engineering. Justice demands all restrictions be removed.

Administrative officers in industry, salaried men, are allowed to receive from their employers a benefit built up for old age retirement by deductions made from the profits of the industry, and deducted from the assets or profits as expense. The medical, legal, dental, and other professions have been asking for such a provision, the Reed-Keough Bills, which could be deducted from income before taxes and invested the same as industry is now doing. If we do not ask for some such benefit, it will not come unsolicited. It is our just right. Let us write some letters. Letters removed us from the unwanted Social Security. They might do the same with voluntary, self-planned retirement programs.

FOR BETTER NURSING IN MICHIGAN

A RATHER COMPLETE survey of nursing needs and resources has just been published, involving a study made by the Advisory Committee representing the Michigan League for Nursing, the Michigan Board of Nursing, the Michigan State Nurses Association, the Michigan State Association of Industrial Nursing, the Michigan Practical Nurses Association, the Michigan Blue Cross, the Michigan Hospital Association, the Michigan State Medical Society, the Woman's Auxiliary of the Michigan Hospital Association, the Woman's Auxiliary of the Michigan State Medical Society, the Michigan Department of Public Instruction, the Michigan Department of Health, the Michigan Department of Mental Health, the Michigan Public Health Association, the State Federation of Woman's Clubs, the Michigan Farm Bureau, and members at large.

The study was conducted under the auspices of the Division of Nursing Resources of the United States Public Health Service in the Department of Health, Education and Welfare. It was published by the Cunningham Drug Company Foundation of Detroit. There are 115 pages of text and fifty-seven pages of appendix. In the United States in 1953, Michigan ranked seventh in the total number of registered nurses employed, fourth in the number of industrial nurses, and ninth in the number of public health nurses.

The general hospitals of the state employ 10,889 registered nurses and 13,505 non-professional nurses, to care for nearly half of the hospitalized citizens. The tuberculosis and mental disease hospitals in Michigan caring for just over 50 per cent of our hospitalized patients use 879 registered nurses and 4,623 non-professional nurses. The Federal Government uses 567 registered nurses and 1,280 non-professionals. There are 836 public health nurses, 1,017 in industry, 1,280 in doctors' offices, 1,421 in private duty, and 347 in nursing education. These last groups are all registered nurses.

According to the survey Michigan needs al-

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Mental Health is Every Physician's Business

During the early part of February, an unprecedented event took place in Detroit—the National Governors' Conference on Mental Health. Here the well-known Ten Point Program was adopted. An equally significant conclusion was the observation that mental health is everyone's business. It must have been this principle which prompted public officials to abandon the argument that prime responsibility for existing defects in mental health programs lies with professional personnel. It must have been this principle which prompted the professional group to abandon the countercharge. The importance of this emphasis on mutual responsibility and joint effort was most clearly demonstrated by those participants who enthusiastically reported that the people of their respective states had become the greatest ally in the campaign against mental illness once the needs of the mentally ill had been accurately publicized.

It sometimes appears that doctors of medicine do not recognize that mental health is every physician's buisness. Emotionally disturbed patients, whose workup reveals no evidence of organic disease, are still being dismissed with a curt "there is nothing wrong with you." People in need of psychiatric care are still being allowed to drift into the hands of nonmedical "therapists." We have still not faced the fact that somewhere in the neighborhood of 50 per cent of our patients suffer from illnesses which either have a purely psychogenic basis or are complicated by emotional factors. The majority of the county medical societies in our state still have not organized Committees on Mental Health. A number of articles pertinent to these remarks have appeared within the past year in *The Journal of the American Medical Association* and THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

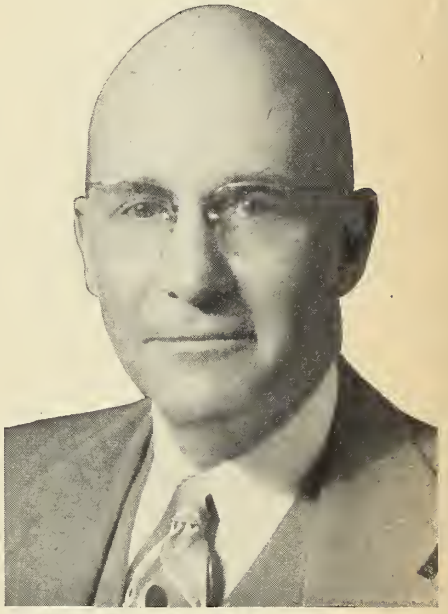
Candor demands that we recognize another fact. Misunderstandings exist between the psychiatrist and his medical colleagues. The importance of the role of psychologic medicine in every practice has not been sufficiently elucidated by the psychiatrist. He is not with us often enough on ward rounds or at medical society and hospital staff meetings. He has unwittingly allowed the extent and nature of available psychiatric services to be misrepresented.

Perhaps it would be a good idea to call a medical conference dedicated to the theme "Mental Health Is Every M.D.'s Business." I am sure that a symposium on "Psychologic Medicine in Everyday Practice" or "Referral of Patients to the Psychiatrist" would be well attended. This could be another Michigan First.

L. W. Hull

President, Michigan State Medical Society

President's



Message

FOR BETTER NURSING

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most 5,000 professional nurses at once, but has sufficient non-professional nurses. There are enough training facilities to prepare the needed nurses in sufficient time, but the teaching ranks are sadly deficient and not easily supplied.

The study enters every phase of nursing, giving facts, tables, and suggestions. A complete review is difficult. The report should be read in full.

CAUSE FOR THOUGHTFULNESS

DURING THE month of May, 1954, a Committee of the House of Representatives of the National Congress approved a new amendment to the Social Security legislation, including most of the self-employed professions in the compulsory list, amounting to about ten million new persons. The American Medical Association and the various state medical organizations have opposed the compulsory feature of this legislation for several reasons: first and foremost, we doctors of medicine could set up a much better plan for less money and be self sufficient; we are not eligible for the benefits proposed, for which we would have paid, unless we are willing to retire at age sixty-five. We can benefit by dying and leaving eligible dependents. The Committee, after receiving a flood of telegrams and messages, reversed itself and voted to exempt the medical profession, interns and nurses. As amended, the bill passed the House on June 1, and goes to the Senate.

This reversal action of the Committee was almost unprecedented, and shows the results of repeated and united pressure added to a large amount of legislative wisdom.

FINANCES

WE HAVE been concerned about the great amounts of money appropriated and spent by the Federal Government for the past few years. Some of us have also been staggered by the unknown amounts given away to foreign governments throughout the world. These figures are now available through the courtesy of Michigan's Congressman Paul Shafer.

In the eight fiscal years from 1946 to 1953, inclusive, the United States has given away $47.7 billions of dollars in outright aid to foreign governments. During the same period, so-called federal aid to Americans, money paid to individuals including war veterans, and grants-in-aid to state and local governments, has totalled $32.6 billions. Fifty per cent more has gone to foreign nations, or a proportion of two of our own people to three foreigners.

We do not know how much it takes to collect money and transmit it abroad, but only one dollar out of two ever returns to the states. For Michigan, that is about nine to a hundred. How long can our economy stand these stresses?

SOME COMMENTS ON COMMITMENT TO STATE HOSPITALS

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are not apt to be committed when they are not clearly in need of it. While mistakes are to be avoided they are nowhere near to being so frequent as most people like to think and most commitments follow upon rather grossly disturbed behavior. In fact, one is much more likely to see patients who might have profited by being hospitalized a little sooner, than to see patients hospitalized too soon.

Perhaps a generality about the attitude of the examining physician that will help is that he should recognize that there are usually far more well than sick aspects to the patient. To explain things clearly appeals to what is reasonable and well in him and will often help him both at the time and later. It is to lay emphasis on what is best emphasized in such very ill patients and to avoid the situation in which the patient finds people interested only in what is pathological about him so that he has the impression that attention and interest are to be obtained by being as sick as possible. Commitment can have beneficial aspects or it can be almost entirely traumatic and harmful. It is hoped that what has been written here will help in suggesting ways of utilizing such beneficial aspects as there are, of the patient's experiences during the time when it is being arranged for him to be hospitalized.

Pontiac State Hospital

Loren W. Shaffer, M. D.

Take a group of medical specialists and place them together in an auditorium at the annual meeting of their national society. Then introduce their president for his formal address. . . . All too often this situation is one where tradition and good manners are responsible for the attentive audience, rather than the speech itself.

But not when Dr. Loren W. Shaffer of Detroit is the speaker.



At the annual meeting of the American Venereal Disease Association in Washington, for example, when Loren Shaffer presented his presidential address last April 30, members of the audience were literally sitting on the edges of their chairs as he detailed to them the dangers of the present complacency toward the problems of venereal disease control.

Dr. Shaffer's sincerity and grasp of his subject commanded unwavering attention as he bombarded his colleagues with fact after fact.

The scope, effectiveness and enthusiasm of his speech were no surprise to those physicians who know him as a teacher at Wayne University College of Medicine. Most doctors of medicine who have studied under Loren Shaffer since he accepted the appointment as professor and chairman of the Department of Dermatology and Syphilology at Wayne in 1937 look back to their student days with the feeling that when they left Dr. Shaffer's courses they left with much more than a store of technical knowledge.

They know they have gained other less tangible, benefits from their experience with a wise and humane physician who, although he is a specialist among specialists, gives both his students and patients the same attention and confidence which so often is limited to only the family doctor.

Throughout his service at Wayne University, Dr. Shaffer has also served as director of the Social Hygiene Division of the Detroit Department of Health and, in this capacity, has made an impact on public health and venereology for which he is known far beyond the borders of the United States. Both the federal government and the World Health Organization have called upon Dr. Shaffer for his time, ability and efforts to assist in specific problems where the solution was a challenge.

In 1949 he went to the Army hospitals in Hawaii, Guam, the Phillipines, Okinawa and Japan at the request of the Surgeon General of the Army to do consultation work in syphilology. The World Health Organization utilized his services in December, 1951, and January, 1952, to make a venereal disease survey in Israel.

Those who know Loren Shaffer are continually surprised at his energy and ability to do so many things so well. In addition to the duties already described, add his work as consultant to the Veterans Hospital in Dearborn, special consultant to the U. S. Public Health Service, extra mural lecturer at the University of Michigan School of Public Health, and one can only wonder how he has found time to author some forty publications dealing with his specialty. These have appeared in a number of scientific journals both in this country and abroad. Although he has worked primarily as a clinician and a teacher, he has been responsible for a large number of activities in both basic research and its clinical application.

Much of his humanity, his intrinsic interest in the welfare of all his patients, and the broad scope of his general interest are perhaps related to Loren Shaffer's background. He was born on November 2, 1892, in Donegal, Pennsylvania, where he attended country schools. He later

graduated from Indiana Normal School in Pennsylvania. He spent several years as a country school teacher and then attended the University of Michigan for both his premedical and medical work.

After receiving his M.D. degree in 1917, he was commissioned as a medical officer in the Navy and was on active duty from 1917 to 1922. During his medical school work and his hitch in the Navy, he developed an interest in dermatology and syphilology. Following his naval service he accepted a fellowship, and later a first assistantship, in dermatology and syphilology at the Mayo Clinic from 1922 through 1924. Then he becamc assistant professor of dermatology and syphilology under Dr. John Stokes at the University of Pennsylvania, where he remained until he moved to Detroit. During the time that he was in private practice in Detroit from 1925 to 1937, and since that time in his connection with Wayne University and Detroit Social Hygiene Clinic, Loren Shaffer has been able to sandwich in an occasional opportunity to pursue his favorite sport of fishing and his favorite hobby of photography. During his travels, both in a professional capacity and as an avid fisherman, he has managed to develop his proficiency as a photographer so that each time he returns, he brings back a photographic travelogue of professional quality for his friends and acquaintances.

We, Dr. Shaffer's brother physicians, as well as Michigan medicine, have all been benefited by knowing Loren Shaffer.

—John A. Cowan, M.D.

POLIO VACCINE TRIAL NEEDS PHYSICIANS' AID AS IT MOVES INTO EVALUATION PHASE

More than 600,000 children have completed three inoculations, in the field test of the trial polio vaccine developed by Dr. Jonas E. Salk of the University of Pittsburgh. The emphasis now shifts to the evaluation study under the direction of Dr. Thomas Francis, Jr., University of Michigan School of Public Health. The validity of the evaluation is dependent upon data gathered on poliomyelitis cases in the test groups, *including those children in the first three grades who did not get vaccine.*

In addition, data on cases among family members of participating children are an integral part of the study. Since the number of poliomyelitis cases among the test groups may not be large, it is essential that all cases are completely reported. Early diagnosis, prompt reporting and follow-up, and the securing of *necessary epidemiological information and laboratory specimens* are important factors in the evaluation.

An outline of procedures and copies of necessary forms have been sent to local and state health authorities. It is important that physicians in areas where vaccinations were not given, co-operate in the study by notifying local or state health officers of cases occurring among children who participated in the trials and then migrated to another area and children who go to summer camps. Local health officials also need information on participating children who receive injections of Gamma Globulin.

This phase of the study will depend, to a large degree, on the wholehearted co-operation of practicing physicians.

Michigan State Medical Society

Past Presidents 1866-1953

1866—*C. M. Stockwell, Port Huron
1867—*J. H. Jerome, Saginaw
1868—*Wm. H. DeCamp, Grand Rapids
1869—*Richard Inglis, Detroit
1870—*I. H. Bartholomew, Lansing
1871—*H. O. Hitchcock, Kalamazoo
1872—*Alonzo B. Palmer, Ann Arbor
1873—*E. W. Jenk, Detroit
1874—*R. C. Kedzie, Lansing
1875—*Wm. Brodie, Detroit
1876—*Abram Sager, Ann Arbor
1877—*Foster Pratt, Kalamazoo
1878—*Ed. Cox, Battle Creek
1879—*George K. Johnson, Grand Rapids
1880—*J. R. Thomas, Bay City
1881—*J. H. Jerome, Saginaw
1882—*Geo. W. Topping, DeWitt
1883—*A. F. Whelan, Hillsdale
1884—*Donald Maclean, Detroit
1885—*E. P. Christian, Wyandotte
1886—*Charles Shepard, Grand Rapids
1887—*T. A. McGraw, Detroit
1888—*S. S. French, Battle Creek
1889—*G. E. Frothingham, Detroit
1890—*L. W. Bliss, Saginaw
1891—*George E. Ranney, Lansing
1892—*Charles J. Lundy, Flint
(Died before taking office)
*Gilbert V. Chamberlain, Flint
(Acting President)
1893—*Eugene Boise, Grand Rapids
1894—*Henry O. Walker, Detroit
1895—*Victor C. Vaughan, Ann Arbor
1896—*Hugh McColl, Lapeer
1897—*Joseph B. Griswold, Grand Rapids
1898—*Ernest L. Shurly, Detroit
1899—*A. W. Alvord, Battle Creek
1900—*P. D. Patterson, Charlotte
1901—*Leartus Connor, Detroit
1902—*A. E. Bulson, Jackson
1903—*Wm. F. Breakey, Ann Arbor
1904—*B. D. Harison, Sault Ste. Marie
1905—*David Inglis, Detroit
1906—*Charles B. Stockwell, Port Huron
1907—*Hermon Ostrander, Kalamazoo
1908—*A. F. Lawbaugh, Calumet
1909—*J. H. Carstens, Detroit
1910—*C. B. Burr, Flint
1911—*D. Emmett Welsh, Grand Rapids
1912—*Wm. H. Sawyer, Hillsdale
1913—*Guy L. Kiefer, Detroit
1914—*Reuben Peterson, Ann Arbor
1915—*A. W. Hornbogen, Marquette
1916—*Andrew P. Biddle, Detroit
1917—*Andrew P. Biddle, Detroit
1918— Arthur M. Hume, Owosso
1919—*Charles H. Baker, Bay City
1920—*Angus McLean, Detroit
1921—*Wm. J. Kay, Lapeer
1922—*W. T. Dodge, Big Rapids
1923—*Guy L. Connor, Detroit
1924—*C. C. Clancy, Port Huron
1925—*Cyrenus G. Darling, Ann Arbor
1926—*J. B. Jackson, Kalamazoo
1927—*Herbert E. Randall, Flint
1928— Louis J. Hirschman, Detroit
1929— J. D. Brook, Grandville
1930—*Ray C. Stone, Battle Creek
1931—*Carl F. Moll, Flint
1932— J. Milton Robb, Detroit
1933—*George LeFevre, Muskegon
1934—*R. R. Smith, Grand Rapids
1935— Grover C. Penberthy, Detroit
1936—*Henry E. Perry, Newberry
1937— Henry Cook, Flint
1938—Henry A. Luce, Detroit
1939— Burton R. Corbus, Grand Rapids
1940— Paul R. Urmston, Bay City
1941— Henry R. Carstens, Detroit
1942— H. H. Cummings, Ann Arbor
1943— C. R. Keyport, Grayling
1944—*A. S. Brunk, Detroit
1945—*V. M. Moore, Grand Rapids
(Died before taking office)
1945— R. S. Morrish, Flint
1946— Wm. A. Hyland, Grand Rapids
1947—*P. L. Ledwidge, Detroit
1948— E. F. Sladek, Traverse City
1949— Wilfrid Haughey, Battle Creek
(President-for-a-Day, Sept. 21, 1949)
1949— W. E. Barstow, St. Louis
1950— C. E. Umphrey, Detroit
1951— Otto O. Beck, Birmingham
1952— R. L. Novy, Detroit
(President-for-a-Day, Sept. 22, 1952)
1953— R. J. Hubbell, M.D., Kalamazoo

*Deceased.

Michigan State Medical Society

The 89th Annual Session

RECORD ATTENDANCE FORECAST!

It has come to where setting new precedents and breaking attendance records are accepted as routine at Michigan State Medical Society scientific meetings, and there are indications that the 89th Annual Session in Detroit, September 29-30 and October 1 should be no exception.

A full year of planning and preparation, directed by a Committee on Arrangements under the chairmanship of William S. Reveno, M.D., Detroit, has gone into the development of the 1954 session in an effort to make it more outstanding than ever. Invitations were tendered months in advance to insure the presence of the twenty-six most prominent medical lecturers and clinicians available to report latest scientific progress in the six assemblies and fourteen section meetings which will be concentrated in the three-day period.

"From the beginning our aim has been to bring men from the great medical centers who will present useful information which will have practical value in the day-to-day work of the M.D., particularly the general practitioner," according to Dr. Reveno.

It was in arranging the 1954 Biddle Lecture that MSMS had its greatest stroke of good fortune and was able to secure as the speaker Charles W. Mayo, M.D., of Rochester, Minnesota, whose name is widely known in contemporary American medicine and who has recently earned recognition in the field of international relations through his service as United States Delegate to the United Nations.

"We sincerely anticipate a new attendance record at the 1954 Annual Session," Dr. Reveno said. "Early requests for hotel accommodations have been unusually heavy, and now is the time to make your reservations."

The Sheraton-Cadillac Hotel will be the scene of the Annual Session. Reservations should be made directly with the hotel.

Most popular features from the past will be incorporated in the 1954 Annual Session. Related topics will be presented in blocks of two, three or more lectures for the convenience of M.D.'s attending. No luncheon events will be scheduled and each noon hour will be devoted to discussion conferences where speakers for the day will discuss questions from individuals in the audience.

Thursday, September 30, has been set aside expressly as General Practice Day. The Second Annual Beaumont Lecture will be presented Friday morning.

Wednesday evening, September 29, will be Officers Night, featuring the Biddle Lecture and the inauguration of new MSMS leaders. The traditional State Society Night, at which MSMS will be host to all registrants and their guests, will be presented Thursday evening, featuring professional entertainment and providing an opportunity for fun and relaxation.

Ninety-nine exhibits, displaying the very latest in medical supplies and equipment, will pack the exhibition hall.

Concurrent with the Annual Session will be held the annual conventions of the Woman's Auxiliary and the Michigan State Medical Assistants Society, and meetings of a number of specialty groups.

The 89th Annual Session has been planned by doctors of medicine for M.D.'s in Michigan and neighboring states. Every effort has been made to fill the expressed needs of men and women in daily medical practice. Those who have had a hand in the preparations believe they have been successful in arranging a truly outstanding Annual Session.

* * *

Now, Doctor, it's up to you to come and judge for yourself!

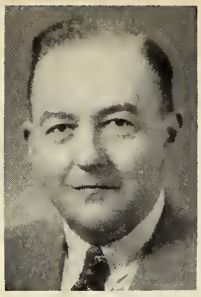
GUEST SPEAKERS 1954



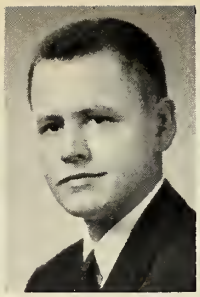
J. H. Allen, M.D.



G. C. Brown, Sc.D.



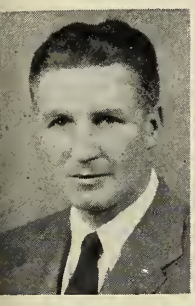
R. B. Capps, M.D.



T. C. Chisholm, M.D.



F. H. Colby, M.D.



Geo. Crile, Jr., M.D.



I. Davidsohn, M.D.



J. E. Eckenhoff, M.D.



W. L. Estes, Jr., M.D.



F. H. Falls, M.D.



W. A. Fansler, M.D.



W. P. Holbrook, M.D.



L. Emmett Holt, M.D.



Carl P. Huber, M.D.



C. A. Janeway, M.D.



F. L. Lederer, M.D.



Robert L. Levy, M.D.



C. W. Mayo, M.D.



R. W. Mohler, M.D.



A. P. Noyes, M.D.



P. A. O'Leary, M.D.



J. H. Pratt, M.D.



F. E. Senear, M.D.



W. G. Smillie, M.D.



I. Snapper, M.D.



C. J. D. Zarafonetis, M.D.



M. M. Zinninger, M.D.

Michigan State Medical Society

The 89th Annual Session

SHERATON-CADILLAC HOTEL, DETROIT, MICHIGAN

September 29-30-October 1, 1954

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Sheraton-Cadillac Hotel, Detroit
Registration—Fifth Floor (see hours below)
Assemblies—Grand Ballroom
House of Delegates—Monday, Tuesday, September 27-28, (Grand Ballroom)
Exhibits—Fourth Floor
Press Room—Suite 500, Fifth Floor
Woman's Auxiliary Headquarters—Fort Shelby Hotel
Michigan State Medical Assistants Society Headquarters —Detroit Leland Hotel

- **REGISTER**—Fifth Floor, Sheraton-Cadillac Hotel—as soon as you arrive.
  Hours:
  Tuesday, September 28, 1:00 p.m. to 5:00 p.m.
  Wednesday, September 29, 7:30 a.m. to 5:00 p.m.
  Thursday, September 30, 8:30 a.m. to 5:00 p.m.
  Friday, October 1, 8:30 a.m. to 3:30 p.m.

- **NO REGISTRATION FEE FOR MEMBERS OF MSMS AND OTHER STATE MEDICAL ASSOCIATIONS, AMA, AND CANADIAN MEDICAL ASSOCIATION**
  Admission will be by badge only to all Scientific Assemblies, Section Meetings, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership card to expedite your registration. We wish to save your time.

- **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Present credentials at the Registration Desk.
  Bona fide doctors of medicine serving as residents, interns, or who are associate or probationary members of Michigan county medical societies, if vouched for by an MSMS Councilor or the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests. Present credentials at the Registration Desk.

- **MICHIGAN DOCTORS OF MEDICINE**, in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests upon payment of $25.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1954 ONLY, provided they subsequently are accepted as members by the County Medical Society in whose jurisdiction they practice.

- **DOCTOR**, register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1954 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.
  We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, September 28, from 1:00 to 5:00 p.m., Fifth Floor, Sheraton-Cadillac Hotel.



William S. Reveno, M.D., 958 Fisher Bldg., Detroit, is General Chairman of Arrangements for the 1954 MSMS Annual Session. Dr. Reveno has been long-time Chairman of the MSMS Preventive Medicine Committee and during the past two years has served as Chairman of the fact-finding Medical Advisory Committee to Michigan Hospital Service.

- **TELEPHONE SERVICE**—Special lines to handle local and long distance telephone service for registrants at the MSMS meeting will be installed on the Fourth Floor, near Grand Ballroom, Sheraton-Cadillac Hotel. Call WOodward 1-8000.

- **GUESTS ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

NEW INFORMATION IN THE EXHIBIT—

Many items of interest or education will be found in the large exhibit of ninety-nine technical displays. The Exhibit Section at MSMS Annual Sessions is as important, informative and desirable to most doctors of medicine as the scientific papers presented in the Assembly room.

Doctor, stop at every booth—you'll be surprised how much you'll learn! No high-pressure salesman but a courteous well-informed exhibitor will greet you and supply you with some valuable information helpful to your patients.

- **CHECK ROOM**—Fifth Floor, Sheraton-Cadillac Hotel near elevators (Guide will indicate location).
- **PUBLIC MEETING**—The evening Assembly of Wednesday, September 29—Officers Night—will be open to the public. Invite your patients and other lay friends to this entertaining meeting, to be held in the Grand Ballroom of the Sheraton-Cadillac Hotel at 8:30 p.m. Program on Page 777.

SECTION MEETINGS—on Wedesday-Thursday-Friday, September 29-30-October 1, immediately following adjournment of the daily Assembly.

WEDNESDAY, SEPTEMBER 29, 5:00 to 6:00 p.m. The following Sections will meet: Ophthalmology, Pediatrics, Public Health and Preventive Medicine, Surgery and Urology.

THURSDAY, SEPTEMBER 30, 5:00 to 6:00 p.m. The following Sections will meet: Gastroenterology-Proctology, General Practice, Nervous and Mental Diseases, Obstetrics-Gynecology, and Otolaryngology.

FRIDAY, OCTOBER 1, 5:00 to 6:00 p.m. The following Sections will meet: Anesthesiology, Dermatology-Syphilology, Medicine and Pathology.

- **CABARET-STYLE DANCE AND FLOOR SHOW,** with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom of the Sheraton-Cadillac Hotel at 10:30 p.m., Thursday, September 30. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.

- **TRANSPORTATION**—The C & O Streamliners afford a convenient means of transportation to the MSMS Annual Session in Detroit for hundreds of physicians in the central and western parts of the State.

- **PARKING**—Do not park on Detroit's streets. Inside parking, at a convenient distance from the Sheraton-Cadillac Hotel, is available at the Book Tower Garage, 333 State, the DAC Garage, 1754 Randolph, and the Grand Circus Garage, 1776 Randolph.

- **POSTGRADUATE CREDITS ARE GIVEN TO EVERY MSMS** member who attends the Annual Session.

- **THE TECHNICAL EXHIBIT** will open daily at 8:30 a.m. and close at 5:15 p.m., except on Friday when the break-up is at 3:30 p.m. Frequent intermissions to view the educational exhibits have been arranged before, during, and after the Assemblies.

MICHIGAN MEDICAL SERVICE MEMBERS' SCHEDULE

(Coincident with MSMS Annual Session)

441 East Jefferson Avenue, Detroit

New Michigan Medical Service Headquarters

1:00 p.m. Luncheon

2:00 p.m. MMS Annual Meeting

All MSMS Delegates are Members of Michigan Medical Service corporation and are expected to attend the MMS Luncheon and Annual Meeting.

The MMS Annual Meeting is open to ALL members of the Medical profession who are cordially invited to attend.

- **WM. S. REVENO, M.D.,** Detroit, is General Chairman of Arrangements for the 1954 MSMS Annual Session in Detroit.

The Scientific Press Relations Committee is composed of: R. A. Johnson, M.D., Chairman; H. F. Dibble, M.D., and J. G. Molner, M.D., of Detroit, and E. F. Sladek, M.D., Traverse City.

INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE will be found at the Michigan State Medical Society Annual Session. All subjects on the MSMS Annual Session Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

- **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 27, at 10:00 a.m., Grand Ballroom, Sheraton-Cadillac Hotel; it will hold three meetings on Monday, September 27, at 10:00 a.m., 2:00 p.m. and at 8:00 p.m.; also two meetings on Tuesday, September 28, at 9:30 a.m. and at 8:00 p.m.

PRE-REGISTRATION OF DELEGATES WILL BE HELD SUNDAY, SEPTEMBER 26, FROM 8:00 TO 10:00 P.M. AT ENTRANCE TO GRAND BALLROOM, FOURTH FLOOR. PLEASE REGISTER IN ADVANCE AND SPARE YOURSELF STANDING IN LINE MONDAY MORNING.

* * *

- **PAPERS WILL BEGIN AND END ON TIME**—Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

THREE DISCUSSION CONFERENCES

Three quiz periods will be held Wednesday-Thursday-Friday, September 29-30-October 1, Grand Ballroom, Sheraton-Cadillac Hotel, 12:00 noon to 1:00 p.m., with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss an interesting case with them, is provided at these Discussion Conferences.

- **"UBIQUITOUS HOSTS"**—The following Detroit doctors of medicine have placed themselves at the disposal of the twenty-five visiting guest essayists who are on the program of the 89th Annual Session in Detroit; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the United States: H. B. Appelman, M.D., C. D. Benson, M.D., Z. S. Bohn, M.D., R. R. Cooper, M.D., J. E. Croushore, M.D., W. S. Davies, M.D., P. E. Derleth, M.D., R. A. Gerisch, M.D., S. E. Gould, M.D., M. S. Hecht, M.D., Harold Henderson, M.D., Louis Jaffe, M.D., J. J. Lightbody, M.D., E. E. Martmer, M.D., G. T. McKean, M.D., D. W. McLean, M.D., E. G. Merritt, M.D., J. G. Molner, M.D., Coleman Mopper, M.D., H. B. Rice, M.D., J. R. Rogin, M.D., E. D. Rothman, M.D., Wm. L. Sherman, M.D., D. F. Strohschein, M.D., and R. P. Reynolds, M.D.

* * *

A CONCENTRATED THREE-DAY POSTGRADUATE COURSE—A CAPSULE OF GREAT VALUE TO THE MICHIGAN PRACTITIONERS OF MEDICINE—THAT'S THE MSMS ANNUAL SESSION OF 1954.

* * *

- **THE SECOND BEAUMONT LECTURE OF THE MICHIGAN STATE MEDICAL SOCIETY,** will be presented by Walter A. Fansler, M.D., Minneapolis, Minnesota, on Friday, October 1 at 9:00 a.m. Doctor Fansler's subject will be: "Indications for Roentgenological Studies of the Colon and Significance of Roentgenological Findings."

GENERAL PRACTICE DAY

1954 MSMS Annual Session

Thursday, September 30, will be "General Practice Day" at the Detroit Session of the Michigan State Medical Society.

The Assembly subjects on the second day of the convention are especially dedicated to the interest of general practitioners.

The General Practice Section also will meet on Thursday at the Sheraton-Cadillac Hotel, Detroit.

• MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS.

Tuesday, September 28, 1954

1. **Michigan Branch, Academy of Pediatrics,** will hold an all-day meeting in the English Room, Sheraton-Cadillac Hotel.

Wednesday, September 29, 1954

2. **Michigan Regional Committee on Trauma,** American College of Surgeons, will meet for luncheon at 12:00 noon in the English Room, Sheraton-Cadillac Hotel, followed by a business meeting at 3:00 p.m. and a scientific meeting from 3:30 to 5:00 p.m.

3. **The MSMS Section on Ophthalmology** will meet at 5:00 p.m. in Parlors G-H-I. The speaker will be James H. Allen, M.D., of New Orleans, Louisiana, on "Ocular Burns." The meeting will be followed by cocktails and dinner in Parlors G-H-I.

4. **Executive Committee of the Michigan Academy of General Practice** will hold a dinner meeting at 6:00 p.m. (Location to be announced) (See item 6).

5. **Michigan Medical Alumni Reunion,** English Room, 6:30 p.m., cocktails and dinner.

Thursday, September 30, 1954

6. **Michigan Academy of General Practice** will meet for dinner beginning at 6:30 (Location to be announced).
   Speaker: Paul de Kruif, Ph.D., Holland
   "Importance of the General Practitioner"

7. **The Michigan Chapter, American College of Chest Physicians** will hold a dinner-meeting beginning at 6:30 p.m. in the Pan American Room.

8. **The Wayne University College of Medicine Alumni Association** will hold an alumni banquet on Thursday, September 30, in the English Room of the Sheraton-Cadillac Hotel at 6:30 p.m. Alumni, their wives and guests are cordially invited. Tickets will be available at the registration desk. Dean Gordon Scott will give a report for the Medical School to the alumni. The banquet program will be dismissed in time for alumni to attend State Society Night (dancing and entertainment) in the Grand Ballroom of the Sheraton-Cadillac Hotel.
   Alumni headquarters will be maintained at the Sheraton-Cadillac Hotel during the Annual Session.

Women's Organizations

9: **The Woman's Auxiliary to the Michigan State Medical Society** will meet as follows:

WOMAN'S AUXILIARY PROGRAM

September 27, 28, 29, 30

Headquarters, Hotel Fort Shelby, Detroit, Michigan

(Registration from 9:00 A.M. Tuesday through Thursday noon in the hotel lobby)

The Hospitality Room will be open from Tuesday evening on throughout the duration of the convention to the wives of all M.D.'s.

Monday—September 27

A.M.

10:30 President's Report to the Michigan State Medical Society House of Delegates.
Grand Ballroom, Sheraton-Cadillac Hotel

Tuesday—September 28

P.M.

6.30 Organization Dinner for Retiring and Incoming Directors and the President Elect.
Fort Room, Hotel Fort Shelby

6:30 Past Presidents' and Secretaries' Dinner
Woman's City Club
Mrs. T. Grover Amos, Chairman

Wednesday—September 29

A.M.

9:30 Pre-Convention Board Meeting
Crystal Room, Hotel Fort Shelby
(For 1953-54 State Officers, Directors, Chairmen and County Presidents)

10:30 Annual Meeting opens. Mrs. Walter Stinson, Presiding
Crystal Room, Hotel Fort Shelby

P.M.

12:30 Luncheon, honoring Past State Presidents.
Coral Room, Hotel Fort Shelby

2:30 Resume General Session
Crystal Room, Hotel Fort Shelby

4:00 Meeting adjourned until 9:00 A.M. Thursday

6:00 Annual Banquet (Dress Optional). All husbands cordially invited. Speaker to be announced later.
Coral Room, Hotel Fort Shelby

8:30 MSMS Officers' Night. Biddle Lecture
Grand Ballroom, Sheraton-Cadillac Hotel

Thursday—September 30

A.M.

9:00 Resume General Session of Annual Meeting
Election of Officers
Coral Room, Hotel Fort Shelby

12:00 Annual Luncheon
Speaker, Mrs. George Turner, President, Woman's Auxiliary to AMA
Installation of Officers

P.M.

2:30 Adjournment of General Meeting

2:45 Post-Convention Board Meeting, Mrs. A. F. Milford, presiding
(For 1954-55 State Officers, Directors, Chairmen and County Presidents)

10:30 MSMS State Society Night, Grand Ballroom, Sheraton-Cadillac Hotel

10. The Michigan State Medical Assistants Society will meet, as follows: Detroit Leland Hotel

Wednesday—September 29

A.M.

9:30 Registration

10:15 "Epilepsy"—Willard W. Dickerson, M.D., Caro State Hospital

11:00 "Live Longer and Like It"—Lloyd Beemer, Parke, Davis & Co.

11:45 Discussion of Group Insurance Plans

P.M.

12:30 Luncheon—
Hostess: Mrs. Ruth Ceaser

2:30 Annual Business Meeting and Election of Officers

4:30 View Exhibits at Sheraton-Cadillac Hotel

6:00 Cocktail Hour—Courtesy of Parke, Davis & Co.

7:00 Banquet—Courtesy of Parke, Davis & Co.
Hostess: Miss Marlouise Redman

Thursday—September 30

A.M.

9:30 Registration

10:15 "The Menopause"—C. S. Waggoner, M.D., Detroit

11:15 "Cancer Control and The Family Physician"—John S. DeTar, M.D., Milan

P.M.

12:15 President's Luncheon—Courtesy of Michigan Medical Service
Hostess: Miss Grace Malkey

2:30 "The Bridge Between Doctor and Patient"—A. Westley Rowland, A.B., M.A., News Editor of Michigan State College, Department of Information Services

4:30 View Exhibits at Sheraton-Cadillac Hotel

PLEASE MAKE HOTEL RESERVATIONS AS SOON AS POSSIBLE AT THE DETROIT-LELAND HOTEL.

Address communications to: L. G. Hodgkins, Sales Manager, Detroit-Leland Hotel, Detroit 26, Michigan

Please send all other reservations to the following:

Wednesday, September 29

Luncheon
Reservation with check for $2.75 to:
Mrs. Ruth Ceaser, 1025 David Whitney Bldg., Detroit 26, Michigan

Cocktail Party and Banquet—Courtesy of Parke, Davis & Co.
Reservation to: Miss Marlouise Redman, 541 David Whitney Building, Detroit 26, Michigan

Thursday, September 30

President's Luncheon—Courtesy of Michigan Medical Service
Reservation to: Miss Grace Malkey, 1919 East Grand Blvd., Detroit 11, Michigan

* * *

Margaret Thompson and the girls from Saginaw have kindly consented to have charge of the Registration Desk again, and Adeline French and Margaret Schmittdiel of Detroit will be at the Information Desk.

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

89th Annual Session

Detroit, September 27-October 1, 1954

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to the Committee on Hotels for MSMS Convention, Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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Committee on Hotels,
Michigan State Medical Society Annual Session
c/o Sheraton-Cadillac Hotel
Detroit, Michigan

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving September.....hour.....A.M.....P.M.

Leaving .....hour.....A.M.....P.M.

Hotel of First Choice: .....

Second Choice: .....

Names and addresses of all applicants including persons making reservation:

Name	Address	City	State
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Date..... Signature.....

Address..... City.....

Michigan State Medical Society

The 89th Annual Session

SHERATON-CADILLAC HOTEL, DETROIT, SEPTEMBER 29-30, OCTOBER 1, 1954

Programs of Assemblies and Sections

WEDNESDAY MORNING
September 29, 1954
First Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: W. M. LeFevre, M.D., Muskegon
Secretary: J. R. Brink, M.D., Grand Rapids

A.M.

9:00 **"The Surgical Treatment of Patients with Jaundice"**

Max M. Zinninger, M.D., Cincinnati, Ohio

Professor of Surgery, University of Cincinnati College of Medicine

In patients with jaundice, one of the first considerations is the determination whether the jaundice is medical or surgical. The history, physical examination, laboratory studies of liver function tests, x-rays, and at times needle biopsy of the liver are all helpful means of making an accurate differential diagnosis. Recently the use of "biligrafin" or "cholografin" has added a new help.

If it can be determined with reasonable accuracy that the jaundice is obstructive in nature, operation is indicated. The chief causes of obstructive jaundice are stone in the ducts, tumor compressing the ducts, or stricture of the ducts. Each of these will be considered separately as regards its clinical course, pre-operative preparation of the patient, and some details about methods of treatment which have been of help to the speaker in years past.

9:30 **"Changing Trends in Abdominal Surgery"**

George Crile, Jr., M.D., Cleveland, Ohio

Department of Surgery, Cleveland Clinic

Increasing experience in gastric surgery indicates that the results of gastric resection for gastric ulcer are excellent, that recurrences are few and except in highlying ulcers it is not necessary to remove much of the stomach to effect a permanent cure.

The duodenal ulcer situation is different, and the final answer to the problem is not yet apparent. Certainly gastroenterostomy alone is not a satisfactory operation nor is vagotomy alone. Two-thirds gastric resection is followed by recurrent ulceration in nearly 10 per cent of the cases if they are followed carefully over a five- to ten-year period. Gastroenterostomy and vagotomy over a five-year period is attended by about a 7 per cent incidence of marginal ulceration Radical gastrectomy, although attended by a much lower incidence of recurrent ulceration, is attended by an even higher incidence of disabling side effects. For this reason, many surgeons are now combining small resections; in effect, hemigastrectomy, with vagotomy in an attempt to control the ulcer diathesis without incurring disabling side effects. To date the results are promising but it is too early to state whether or not the end results will be superior to other forms of therapy.

In cancer of the stomach, particularly lesions of the cardia, and in cancer of the pancreas the present trend is toward conversatism. The results of super-radical surgery for lesions which have spread beyond their site of origin have been uniformly disappointing, and most surgeons are limiting resections of carcinomas of the upper portion of the stomach and of the pancreas to those tumors which are still localized to the organ in which they originated. The results even in these favorable cases are not satisfactory.

In the past five years we have learned that cancer frequently develops in colons of patients who have active ulcerative colitis for periods of five years or more. Technical developments in the formation of an ileostomy and of the appliances for collecting the secretion have made earlier operation in these cases desirable. Emergency colectomy with simultaneous ileostomy is also being more commonly used in the treatment of the fulminating type of ulcerative colitis which in the past carried with it such a high mortality.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 **"The Responsibility of the Surgeon in the Restoration of the Industrial Injured to His Greatest Possible Earning Power"**

William L. Estes, Jr., M.D., Bethlehem, Pennsylvania

Consultant in Surgery, St. Luke's Hospital

I. Actual Care of Injured

Immediate instruction of and explanation to patient how maximum recovery can be obtained.

Combined efforts of *injured* and surgeon plus experts in Physical Medical therapy, to obtain full recovery.

Fine effective teamwork.

A. *Surgeon Responsibility*
   (1) Repair of damaged tissues
   (2) Insure proper healing of wounds and recovery from effect of wounds
   (3) Restorative surgery
   (4) Maximum return of function

B. *Patient's Responsibility*

Recovery of function aided by Physical Therapist and physical medicine. One does not simply supplement the other's efforts, but each *parallel* one another. Early efforts of patient are as important as and must accompany early treatment by surgeon. Patient must understand his part. Surgeon must help injured understand that recovery of function depends on him himself and early and immediate appropriate efforts by patient are as important as early good surgery.

Good team work, but the surgeon must be the director of the team.

II. Fundamental Economic Problem

Are present workmen's compensation laws outmoded? Should emphasis on and the need for the restoration of the injured to maximum functional recovery and earning power not replace the old concept of spotlighting mere monetary compensation for injury received and the loss of income and earning power?

Should not the surgeon assume leadership to obtain a change in the laws to recognize by appropriate legal action the need for:

1. The Injured to be aided and supported financially until full potential return of function and earning power has been attained. Early return to work may often be an essential element to attain that end.

2. The establishment of facilities, such as Rehabilitation Centers and Vocational training schools as adjuncts to the recovery of maximum functional and financial earning power.

3. Proper legal action to assure adequate standard of efficiency in facilities for overall care of injured.

11:30 **"Early Carcinoma of the Prostate: Diagnosis and Treatment"**

Fletcher H. Colby, M.D., Boston, Massachusetts

Associate Clinical Professor, Genito-Urinary Surgery, Harvard Medical School; Former Chief, Urological Service, Massachusetts General Hospital

Carcinoma of the prostate is surprisingly common. Figures from many sources indicate the frequency with

which this condition occurs. Five out of every one hundred men over sixty years of age, it is said, will develop cancer of the prostate. Each year, therefore, in this country 35,000 men will develop this disease. Its incidence is even higher as determined by autopsy material. Histological evidence of prostatic cancer has been described by various observers in from 14 to 50 per cent of men over fifty years of age. The clinical significance of such observations, however, is not clear. Next to cancer of the stomach, cancer of the prostate is the commonest malignant tumor in males over sixty.

In spite of the frequent occurrence of prostatic cancer few cases are recognized early and fewer receive adequate treatment. The reasons for this are clear. Early cancer of the prostate by itself produces no symptoms. When the condition is suspected on routine physical examination radical surgical treatment often is not advised.

The diagnosis of early prostatic cancer is not always easy. Rectal palpation and needle biopsy are useful but fallible. Perineal exposure with frozen section is the most accurate method of diagnosis.

Estrogen therapy and castration often check tumor growth for long periods but are not curative. Total prostatectomy is the only method at the present that offers a chance of cure.

The results of radical surgery in the treatment of early cancer of the prostate compare favorably with the surgical treatment of cancer of other organs. Mortality has been low, functional results have been good and five year survivals without clinical disease average about 50 per cent.

12:00 END OF FIRST ASSEMBLY

WEDNESDAY NOON

(No Luncheons)

September 29, 1954

12:00 noon to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: E. A. Osius, M.D., Detroit

Participants: James H. Allen, M.D., Fletcher H. Colby, M.D., George Crile, Jr., M.D., William L. Estes, Jr., M.D., Charles A. Janeway, M.D., Roy W. Mohler, M.D., Wilson G. Smillie, M.D., and Max M. Zinninger, M.D.

WEDNESDAY AFTERNOON

September 29, 1954

Second Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: B. T. Montgomery, M.D., Sault Ste. Marie

Secretary: W. B. Prothro, M.D., Grand Rapids

P.M.

2:00 "The Control of Infectious Diseases"

Charles A. Janeway, M.D., Boston, Massachusetts

Thomas Morgan Rotch Professor of Pediatrics, Harvard Medical School; Physician-in-Chief, Children's Hospital and Infants' Hospital, Children's Medical Center

Advances in the isolation of viruses, the preparation of vaccines, and the purification of human antibodies have strengthened the hand of the physician in dealing with infectious diseases. In an unsterile world, from which it has not yet been possible to eliminate pathogenic microorganisms, the physician must supervise the immunological growth and development of the child as he extends his social contacts and thus his opportunities for contracting infection. The timing of the initial contact with various infectious agents is very important. The particular problems of prenatal, neonatal, infantile, childhood, and adolescent infections will be discussed, both as regards the types of infection and differences in response observed. The role of active and passive immunization, and of natural infection in the development of resistance to specific infections will be brought out. A real change in philosophy in the use of quarantine procedures has come about with increased knowledge of most communicable diseases, so that today emphasis is usually placed upon protection of the few especially vulnerable individuals rather than upon a futile attempt to protect the whole community from the spread of infection.

2:30 "Ocular Manifestations of Leprosy"

James H. Allen, M.D., New Orleans, Louisiana

Professor and Chairman, Department of Ophthalmology, Tulane University School of Medicine

Ocular lesions characteristic of leprosy occur in approximately 90 per cent of patients during the course of the disease. Severe ocular lesions are more frequent in the lepromatous type.

Characteristic lesions develop on the brow and occasionally on the lids, resulting in loss of hair from the brow and lashes from the lid margins.

Acute and chronic episcleritis occur frequently but clinically are not different from similar lesions occurring in other diseases.

Keratitis due to leprosy is characterized by superficial punctate greyish or chalky infiltrations usually beginning in the superior temporal quadrant. These lesions extend into adjacent quadrants, as well as centrally, eventually involving the entire cornea. In many cases similar chalky lesions appear in the deeper layers of the stroma, as the superficial involvement progresses. Blood vessels also invade the cornea as the lesion progresses. Superficial vascularization is most frequent, but very often both superficial and deep vascularization occur simultaneously and rarely only deep vascularization develops.

The characteristic involvement of the iris is a chronic nodular or granulomatous lesion. However, acute serous iritis similar to that seen in non-leprous patients occurs frequently. Both types of iritis are subject to recurrences and after repeated attacks of either variety small round glistening yellow nodules called "pearls" develop in the superficial layers of the iris. In addition in uncontrolled cases the usual sequelae of prolonged iris inflammation may appear, i.e., posterior synchiae, inflammatory pupillary membranes, iris bombe, secondary glaucoma, cyclitis and cyclitic membranes, complicated cataract, et cetera.

Involvement of the posterior portions of the choroid and the retina is rare; however, a few cases of retinal involvement have been observed. In these cases "pearls" similar to the ones seen in the iris have developed in the retina.

Other lesions produced by the disease will be discussed in the completed paper.

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "The Management of Labor at Term"

Roy W. Mohler, M.D., Philadelphia, Pennsylvania

Clinical Professor of Obstetrics and Gynecology, Jefferson Medical College; Assistant Attending Obstetrician and Gynecologist at Jefferson Hospital; Obstetrician and Gynecologist-in-Chief and President of Staff at Methodist Hospital

The management of labor at term culminates most frequently an association of a patient and her physician over a considerable period of time. The labor is looked upon with a good deal of apprehension by the patient and her family, and the physician must assume an unusual responsibility and exhibit sound judgments and skills in his part of this important event.

Elective Induction of Labor.

The determination of the existence of labor. The importance of vaginal examinations in early labor. Characteristics of real labor pains versus false and ineffective pain. Characteristics of the cervix and its behavior in labor. The dynamics of cervical effacement.

The attendance of the patient in labor. The type of analgesia and time that it should be utilized. The need for familiarity with the technique of the analgesia which one chooses to use. All types of analgesia will inhibit labor to various degrees; they therefore should be used with caution and understanding.

The technique of the actual delivery—should the delivery be consummated spontaneously or with forceps?

The technique which I prefer for the management of the third stage of labor.

4:30 "The Role of Preventive Medicine in Modern Medicine"

WILSON G. SMILLIE, M.D., New York, New York
Professor and Head of the Department of Public Health and Preventive Medicine, Cornell University Medical College

Preventive Medicine in recent years has become an essential component of adequate medical care. A generation ago the prevention of disease and the promotion of individual and community health was considered the special prerogative of the public health department. Preventive medicine was considered as a separate entity in medical care to be promoted by trained personnel who utilized special techniques in the prevention of contagious disease and in the control of environmental factors that might have a part in community health and welfare. The practicing physician played only a small role in the public health program of the community.

In recent years, communicable disease as a community wide menace has been, to a great degree, held in check. The essential problems of environmental sanitation have been solved. It is true that new environmental situations are continually arising which threaten the life and health of the community and these serve as a challenge to the health officials at all times. But the general principles of environmental sanitation are well understood.

The concept is now emerging that preventive medicine is not the special province of the health officer, but is an integral part of medical care. Therefore, it must be incorporated in the practice of every physician to the same degree that he develops the other basic elements of medical care, namely, diagnosis, treatment and rehabilitation.

It has also become clear that the great opportunity for the next generation of physicians in the field of preventive medicine lies not in the direction of communicable disease control, not in environmental sanitation, but in the early detection of degenerative disease and the determination of the basic causes of chronic disease. He will have greater opportunity for promotion of the health and well being of the individual and with less and less opportunity to prevent acute illness and to prolong life.

5:00 END OF SECOND ASSEMBLY

Program of Sections

WEDNESDAY

September 29, 1954

5:00 to 6:00 p.m.

SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Pan American Room, Sheraton-Cadillac Hotel

Chairman: C. A. NEAFIE, M.D., Pontiac
Secretary: W. B. PROTHRO, M.D., Grand Rapids

"Experimental Aspects of Immunization Against Poliomyelitis"

GORDON C. BROWN, Sc.D., Ann Arbor, Michigan
Professor of Epidemiology, University of Michigan School of Public Health

The experimental aspects of both passive and active immunization against poliomyelitis are discussed.

Passive immunization attempts through use of gamma globulin have suggested that some modification and prevention of the disease is possible if given before exposure to virus. Experimental evidence obtained by virus studies of families in which poliomyelitis has been diagnosed shows that gamma globulin does not affect the development of persistence of subclinical infection nor does it interfere with the development of active immunity following intestinal infection.

Active immunization which has been adequately demonstrated in experimental animals should be accomplished by the administration of killed, polivalent virus vaccine. The laboratory methods of evaluating the experimental program of the trial vaccine in humans during 1954 will be described.

SECTION ON OPHTHALMOLOGY

Parlors G-H-I, Sheraton-Cadillac Hotel

Chairman: L. F. CARTER, M.D., Detroit
Secretary: G. H. MEHNEY, M.D., Grand Rapids

"Ocular Burns"

JAMES H. ALLEN, M.D., New Orleans, Louisiana

A discussion of the present status of experimental and clinical information on ocular burns will be presented.

SECTION ON PEDIATRICS

English Room, Sheraton-Cadillac Hotel

Chairman: HAROLD B. ROTHBART, M.D., Detroit
Secretary: J. E. WEBBER, M.D., Grand Rapids

"The Child with Nephrosis"

CHARLES A. JANEWAY, M.D., Boston, Massachusetts

The title of this talk places emphasis where it ought to be—namely, on the child rather than his disease. The biggest single difficulty in managing a patient with a serious chronic disease, such as nephrosis, is handling the effect of the illness on the child and his family, with its impact upon most family habits such as eating, the family budget, and the relations of the various members of the family with one another. This calls for great skill in the art of medicine.

Treatment of the disease is still far from simple, but a great deal of progress has been made in recent years. First, the antibiotic drugs have markedly lowered the mortality from septic infections, which formerly accounted for many of the deaths, and have changed their character as well. Second, corticotropin and the adrenal steroids have made it possible for the physician to induce remissions with about 75 per cent certainty. The problem of maintaining the remission, once induced, and the complications which may arise during hormonal treatment still present difficulties.

The natural history of nephrosis in children has been further elucidated by the virtual elimination of deaths from intercurrent infection. Either ultimate complete recovery or permanent renal damage may occur. It is now generally accepted that acute glomerulonephritis on the one hand and nephrosis on the other are different diseases, but that the distinction between lipoid nephrosis and chronic glomerulonephritis with edema is probably unwarranted in children.

SECTION ON SURGERY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: C. D. BENSON, M.D., Detroit
Secretary: J. W. LOGIE, M.D., Grand Rapids

"Treatment of Diverticulosis and Diverticulitis of the Colon"

MAX M. ZINNINGER, M.D., Cincinnati, Ohio

Many persons over forty years of age have diverticula of the colon, especially in the descending and sigmoid portions. Only a relatively small number of these develops inflammation, and of these only a small per cent require operation. The symptoms, however, may be very severe and the sequelae quite serious unless the condition is recognized promptly and treated adequately. The complications which may occur are severe hemorrhage, perforation, obstruction, and fistula formation. Occasionally cancer may occur in association with diverticula or diverticulosis. The management of these complications may tax the ingenuity and ability of the surgeon. There is, however, a growing belief that resection of the involved segment of bowel is the method of choice in many cases. Techniques and illustrative cases will be presented.

SECTION ON UROLOGY

Founders Room, Sheraton-Cadillac Hotel

Chairman: D. J. Jaffar, M.D., Detroit
Secretary: B. W. Dovitz, M.D., Detroit

"Results of Radical Treatment for Carcinoma of the Bladder"

Fletcher H. Colby, M.D., Boston, Massachusetts

The discouraging results of past methods of treating cancer of the bladder resulted in giving more extensive surgery a trial in attempting to cure this condition. Early tumors confined to the superficial layers of the bladder are satisfactorily dealt with by local destruction. Their only problem is that of the persistent occurrence of new tumors. Neoplasms that invade the underlying bladder muscle are the ones with which we are chiefly concerned. Such tumors often are highly malignant, early spread to regional lymph nodes is common and the results of all forms of treatment have been poor.

Simple cystectomy in the past failed to cure many cases of bladder cancer because the tumor often had spread beyond the bladder. Total cystectomy with pelvic lymph node dissection and transplantation of the ureters to skin or bowel has cured the noninfiltrating tumors but many patients have succumbed to renal failure. Few of the infiltrating tumors have survived these procedures for long periods. Better methods of diverting the urine are urgently needed.

Our Annual Meeting

is a fine time

to renew

Old Friendships

and make new

ones

Come to Detroit!

September 29-30, October 1, 1954

There will be much that

is new and interesting

WEDNESDAY EVENING
September 29, 1954

General (Public) Meeting

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

President: L. W. Hull, M.D., Detroit
Secretary: L. Fernald Foster, M.D., Bay City

P.M.

8:30 **OFFICERS' NIGHT—PUBLIC MEETING**

1. Call to order, announcements and reports of the House of Delegates by L. Fernald Foster, M.D.
2. Introduction of President L. W. Hull, M.D., followed by President's Annual Address.
3. Induction of members into the MSMS "Fifty-Year Club" by President L. W. Hull, M.D.
4. Presentation of scrolls.
5. Introduction of President-Elect R. H. Baker, M.D., Pontiac, and induction of Dr. Baker into office of President of the Michigan State Medical Society by the Retiring President.
   Response of Dr. Baker.
6. Introduction of the new President-Elect and other newly elected Officers and of the Chairman of The Council, William Bromme, M.D., Detroit.
7. Presentation of scroll and Past President's Key to Retiring President Dr. Hull by the Chairman of The Council, Dr. Bromme.

9:15 8. The Andrew P. Biddle Lecture
"The United Nations: Our Hope for the Future"
Charles W. Mayo, M.D., Rochester, Minnesota
Surgeon to Mayo Clinic; Professor of Surgery, Mayo Foundation Graduate School, University of Minnesota; President, American Association for the United Nations.
(30 minutes)



Andrew P. Biddle, M.D.
(Deceased August 2, 1944)
Patron of Postgraduate Medical Education

9. Presentation of Biddle Lecture Scroll

10:00 10. Adjournment

THURSDAY MORNING
September 30, 1954

Third Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: H. H. Hiscock, M.D., Flint
Secretary: C. D. Benson, M.D., Detroit

A.M.
9:00 **Treatment of Rheumatoid Arthritis"**

W. Paul Holbrook, M.D., Tucson, Arizona
Director of Research, Southwestern Clinic and Research Institute; Senior Medical Consultant, St. Mary's Hospital and Tucson Medical Center

Rheumatoid Arthritis is a constitutional disease involving many of the connective tissues of the body, including the joints. We do not know, as yet, the specific etiological agent, nor do we possess a single specific cure. It is essential, then, that every patient with this disease be placed on a basic program directed toward the individual as well as the disease. Such a program must include at least the eight items listed below.

Basic Routine:
1. Psychological Adjustment
2. Rest and Activity
3. Diet and Bowel Management
4. Correction of Anemia
5. Cautious Removal of Foci
6. Relief of Pain
7. Corrective and Postural Exercises
8. Prevention and Correction of Deformity

Once having established such a program, the physician is free to choose certain elective procedures if they are necessary, such as are tabulated here.

Elective Therapy:
1. Transfusions
2. Gold
3. X-ray
4. Pregnancy
5. Jaundice
6. Climate
7. Cortisone and ACTH
8. Hydrocortisone (Compound F)
9. Phenylbutazone (Butazolidin)
10. Other Experimental Antirheumatic Agents

The immediate dramatic effects of ACTH and Cortisone on Rheumatoid Arthritis are well known. Inasmuch as this disease is a chronic one and usually a lifetime problem, evaluation of any therapeutic agent on a long-term basis appears essential. Results of long-term treatment by various agents including ACTH, cortisone and Butazolidin will be presented.

9:30 **"Acute Viral Hepatitis: Epidemiology Diagnosis and Treatment"**

Richard B. Capps, M.D., Chicago, Illinois
Associate Professor of Medicine, Northwestern University Medical School; Senior Attending Physician, St. Luke's Hospital, Chicago

Viral hepatitis is now recognized as one of the more important contagious diseases in this country. Its importance lies not only in the high incidence of the disease but in the prolonged period of disability and the not infrequent occurrence of serious residuals. Since parenteral transmission which accounts for a large number of cases is the responsibility of the profession it is vital that the means of prevention be well understood. These matters will be discussed in detail.

The diagnosis of acute hepatitis is particularly important because it is often confused with surgical jaundice. Operative procedures in acute hepatitis frequently have a fatal outcome. The diagnosis of acute hepatitis and especially the differential diagnosis between surgical jaundice will be discussed.

The management of acute hepatitis has an important bearing on the duration of illness as well as the outcome. Because of recent developments a certain amount of confusion exists regarding this important matter. It will be taken up in detail.

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"The General Practitioner's Role in Otolaryngological Management"**

Francis L. Lederer, M.D., Chicago, Illinois
Professor and Head of Department of Otolaryngology, University of Illinois College of Medicine; Chief of Otolaryngologic Services, Research and Educational Hospital and Illinois Eye and Ear Infirmary.

Conservatively estimated, anywhere from 20 to 40 per cent or more of general practice is related to areas of the head and neck. Commonplace upper respiratory tract infections are forerunners of many of the inflammatory states involving the ears, nose, sinuses, pharnyx and larynx. We are presently in a position to rationally assess experiences with the past decade of antibiotic and chemotherapeutic agents. Accurate diagnostic approaches and common sense clinical appraisal are now to be interpreted in the light of this newer knowledge. The symptom-rich head and neck areas, housing all of the special senses, offer a challenge to the practitioner who sees the patient with the presenting complaint of hoarseness, hearing loss, headache, otalgia, stuffiness of the nose, cough, dizziness and the like. How effectively we analyze these symptoms or their emotional counterparts, may mean the difference between good medicine or our contribution to the patient's shopping excursions and the embrassing creation of latrogenic disease.

The physician is more than just a breathing, compartmentalized reference point. He is the guide of each patient and a community leader as well. To this end otolaryngology offers patterns for rebabilatory methods of handicapped persons who present socio-economic problems which become more complex and costly to the patient, the community and the nation, if not recognized sufficiently early so that suitable preventive, remedial, and curative measures are to be effectively applied.

11:30 **"Psychiatry and the General Practitioner"**

Arthur P. Noyes, M.D., Norristown, Pennsylvania
Superintendent, Norristown State Hospital; President, American Psychiatric Association

Definition and scope of psychiatry. Man's mental functions, like his other biological functions, the result of a long evolutionary process. Definitions of mind and of personality. Study of the mind has become transformed from a branch of philosophy to a branch of biology, or, as termed by Adolf Meyer, psychobiology. What is meant by "dynamic psychiatry." "Mental mechanisms" and how they lead to symptoms. Mental disorders not disease entities. Personality characteristics and how developed. Childhood emotional experiences in relation to mental disorders. Psychotic, psychoneurotic and psychosomatic disorders. Discussion of mental disorders caused by or associated with impairment of brain tissue function. Delirioid reactions. Reactions due to inflammatory or destructive changes in the brain. Discussion of Cannon's observation that emotions may produce physiologic disturbance of organs innervated by the autonomic nervous system. This observation the basis of psychosomatic medicine. Every clinician constantly confronted with problem of interaction of mind on body and body on mind.

12:00 **END OF THIRD ASSEMBLY**

THURSDAY NOON

(No Luncheons)

September 30, 1954

12:00 to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: N. F. Miller, M.D., Ann Arbor

Participants: Richard B. Capps, M.D., Frederick H. Falls, M.D., W. Paul Holbrook, M.D., Carl P. Huber, M.D., Francis L. Lederer, M.D., Arthur P. Noyes, M.D., and Joseph H. Pratt, M.D. (L. Emmett Holt, M.D., *will appear at the discussion conference on Friday, October 1—not on Thursday, the day of his presentation).*

THURSDAY AFTERNOON

September 30, 1954

Fourth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: K. H. Johnson, M.D., Lansing
Secretary: G. H. Mehney, M.D., Grand Rapids

P.M.

2:00 "Abruptio Placentae"

Carl P. Huber, M.D., Indianapolis, Indiana
Professor and Chairman, Department of Obstetrics and Gynecology, Indiana University School of Medicine

Recent literature emphasizes the danger of coagulation defects (Fibrogenopenia) in the maternal blood stream as the factor controlling the plan of management of premature separation of the placenta. The infrequency with which this complication is encountered justifies re-evaluation of the fundamental principles of the management of this complication.

The concept that both fetal and maternal salvage is the essential factor in reaching a decision concerning management of abruptio placentae is important. The greatest role of immediate Caesarean section in the presence of a living infant is fetal survival. Immediate Caesarean section in the presence of a dead infant is unnecessary without a trial of induction of labor and anticipated vaginal delivery.

A plan of management will be outlined.

2:30 "The Diagnosis and Treatment of Carcinoma of the Ovary"

Frederick H. Falls, M.D., Oak Park, Illinois

3.00 INTERMISSION TO VIEW EXHIBITS

4:00 "Celiac Disease—What Is It?"

L. Emmett Holt, M.D., New York, New York
Professor of Pediatrics, New York University College of Medicine

The diagnosis of celiac disease is one which is much abused by the medical profession. Disappearance of the classical picture of the disease, and broadened use of the term to cover minor disturbances which are of doubtful relation to the original entity has resulted in dietary restrictionss which are unnecessary and in some instances harmful. The definition and management of these conditions will be discussed.

4:30 "Diagnosis and Surgical Treatment of Acute Gynecologic Conditions"

Joseph H. Pratt, M.D., Rochester, Minnesota
Head of Surgical Section, Mayo Clinic, Rochester, Minnesota; Assistant Professor of Surgery, The Graduate School, Mayo Foundation, University of Minnesota

A survey of the problems and difficulties encountered in the diagnosis and surgical treatment of emergency gynecological admissions as well as some lesions encountered during a five-year period from 1945 to 1949.

5:00 END OF FOURTH ASSEMBLY

——Program of Sections——

THURSDAY

September 30, 1954

5:00 to 6:00 p.m.

SECTION ON GASTROENTEROLOGY AND PROCTOLOGY

Founders Room

Chairman: R. M. Burke, M.D., Detroit
Secretary: James A. Ferguson, M.D., Grand Rapids

"Cause and Prevention of Unsatisfactory Results Following Anorectal Surgery"

Walter A. Fansler, M.D., Minneapolis, Minnesota
Clinical Professor of Surgery, In Charge of Division of Proctology, University of Minnesota Medical School, Minneapolis, Minnesota

1. Regarding ano-rectal procedures as routine procedures and failing to individualize individual cases.
2. Lack of consideration of gross anatomical and histological variations in tissues of patients.
3. Failing to recognize intercurrent disease which may influence healing.
4. Indiscriminate use of postoperative anesthetic solutions.

5. Inadequate postoperative care.
6. Failure to correct anal stenosis or prevent its postoperative occurrence. This is probably the most frequent cause of unsatisfactory results.
7. Failure to realize that the operative result has not been entirely satisfactory and discharging the patient.

SECTION ON GENERAL PRACTICE

English Room

Chairman: J. W. Rice, M.D., Jackson
Secretary: R. F. Fenton, M.D., Detroit

"Pitfalls of Pelvic Surgery"

Joseph H. Pratt, M.D., Rochester, Minnesota

A discussion of some of the problems of the pelvic surgeon in his relationship with the patient and ways to avoid some of the obvious difficulties and pitfalls attendant to pelvic surgery.

SECTION ON OBSTETRICS AND GYNECOLOGY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: J. L. Gillard, M.D., Muskegon
Secretary: Ferdinand Gaensbauer, M.D., Pontiac

"Intraepithelial Carcinoma of the Cervix Uteri in Pregnancy"

Carl P. Huber, M.D., Indianapolis, Indiana

The occurrence of atypical changes in the epithelial of the cervix uteri is less important during pregnancy than it is in the non-pregnant patient at the same age period. The frequency of routine cytological studies in the obstetric patient makes it mandatory that careful evaluation of subsequent biopsy material be undertaken.

The experience with such epithial changes in patients at the Indiana University Medical Center will be reported and discussed.

SECTION ON OTOLARYNGOLOGY

Parlors G-H-I, Sheraton-Cadillac Hotel

Chairman: I. J. Hauser, M.D., Detroit
Secretary: J. D. Flynn, M.D., Grand Rapids

"Current Trends in Otolaryngology"

Francis L. Lederer, M.D., Chicago, Illinois

Over three decades of otolaryngologic association as a practitioner, educator and administrator do not necessarily permit prophetic license. However, all of these roles allow a vantage point in gathering information of value in assessing the debit and credit side of the otolaryngologist's ledger. Modern day trends place a premium on manpower and upon economic values. The physician, the community, the educator, the industrialist, and the military all have a stake in the health and wealth of its people. As one segment of this public welfare responsibility, we need only to be reminded that 90,000 Veteran Administration ear cases draw $14,000,000 in compensation annually from this government. This figure does not include the cost of, and maintenance of hearing aids. Indications all point to an upsurge of pending litigation in the field of industrial hearing impairment that calls for serious consideration of pre-employment examinations, more careful enginering and planning of installations and structures, the use of ear protectors against noise, research in acoustical fields, and a concerted effort to educate industrialists and the public in this vital problem.

The otolaryngologist has a great stake in the recognition, care and guidance of the preschool and school age group of hearing handicapped children. The behavior problem and the costly so-called retarded child, in many instances will turn out to be hearing handicapped individual. The interest in such a group can well be accepted as an index of the cultural level of a community. The field of tumors notably falls on the responsible shoulders of the physician trained in the head and neck fields. His training in the study and inspection of the air and food passages, together with his skill as a surgeon, eminently equips him to recognize and treat neoplasms of these areas. The same may be said to represent his interests in plastic reconstruction and repair of the conspicuously situated parts of the head and face. The second oldest board, the American Board of Otolaryngology, has for three decades, advanced the cause of the adequacy of training which would stimulate the creation of the complete experience which primarily establishes the trainee as a physician and secondarily as a specialist.

SECTION ON NERVOUS AND MENTAL DISEASES

Pan American Room, Sheraton-Cadillac Hotel

Chairman: K. C. Nickel, M.D., Grand Rapids
Secretary: I. A. La Core, M.D., Ypsilanti

"The Administrator's Place in Psychiatry"

Arthur P. Noyes, M.D., Norristown, Pennsylvania

In addition to purposefully directed therapeutic measures the mental hospital patient is exposed to many psychological influences inherent in or incident to his hospital experience. Some of these influences and experiences are in themselves therapeutic while others are morbific. Which they are is often determined by hospital management and the experiences to which the patient is thereby exposed.

All policies and administrative acts employed in carrying out the purpose of the hospital and its prevailing atmosphere have an important influence upon the mental life of the patient. The general therapy of patients and hospital management are inseparable. One of the most important functions of the administrator is that of structuring the hospital environment as a positive therapeutic agent. Responsibility for attitude of the nursing and other personnel toward patient is a responsibility of the administrator. His attitude toward both personnel and patients should be one of selective permissiveness.

The great advances in understanding the mental patient made possible through a dynamic psychiatry, and the dramatic results sometimes secured in individual cases through some recently introduced forms of therapy should not divert interest and attention from the place and therapeutic importance of the administrative system.

THURSDAY EVENING
September 30, 1954

State Society Night

Grand Ballroom, Sheraton-Cadillac Hotel

P.M.

10:30 **An evening of entertainment for all registrants, ladies and guests.**

Cabaret-style Dance and Floor Show
Host: Michigan State Medical Society
(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

FRIDAY MORNING

October 1, 1954

Fifth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: W. S.. Reveno, M.D., Detroit

Secretary: R. F. Fenton, M.D., Detroit

A.M. **Beaumont Lecture**

9:00 **"Indications for Roentgenological Studies of the Colon and Significance of Roentgenological Findings"**

Walter A. Fansler, M.D., Minneapolis, Minnesota

Clinical Professor of Surgery, In Charge of Division of Proctology, University of Minnesota Medical School, Minneapolis, Minnesota

1. The search for early malignant or premalignant lesions has greatly stimulated more frequent x-ray studies of the colon.
2. Technical advances in these studies have greatly improved in the past few years allowing routine demonstration of small lesions which a few years ago would usually have been missed.
3. Adequate x-ray studies are seldom made by anyone other than an expert roentgenologist who has a definite interest in this field.
4. In the case of early lesions the presence of blood is the earliest symptom. If proctoscopic examination fails to reveal the source of bleeding x-ray studies of the colon should invariably be made.
5. The appearance and amount of blood may be of some significance but the only important fact is that there is any blood whatever.
6. Abdominal cramps, recurrent diarrhea, areas of tenderness over the colon are indications for colon studies but these symptoms are not significant of early lesions though they may occur incidentally.
7. Intermittent cramping, pain, distention, gradually increasing constipation, loss of weight if due to the presence of colon tumors, are usually symptoms of well developed lesions which are easily demonstrated by x-ray without *special difficulty.*
8. The presence of diverticulosis or diverticulitis or extrinsic lesions occasionally make the demonstration of intrinsic growths of the colon very difficult.
9. If a polypoid lesion is demonstrated it is safer removed, regardless of size.

9:30 **"Advances in Dermatologic Therapy"**

Francis E. Senear, M.D., Chicago, Illinois

Professor and Head of Department of Dermatology, University of Illinois College of Medicine

Of the many new drugs and agents introduced in recent years, three types have had important applications in the field of dermatology. These are (a) ACTH, cortisone and hydrocortone, (b) antibiotics, (c) antihistaminics.

An understanding of the uses and limitations of and contraindications for these preparations, is essential for the proper management of many dermatoses. These drugs are used topically as well as systematically, and all too frequently they are prescribed for local use in conditions where there is no indication for their employment. The antihistaminics, used locally, are capable of causing severe sensitization reactions.

Others of the newer preparations have improved materially the prognosis in a variety of dermatoses, such as lichen planus, cutaneous tuberculosis, deep mycotic infections, hyperpigmentations and depigmentations, et cetera.

In recent years there has been renewed interest in methods for the removal of scars. Cryotherapy, the use of sandpaper and of the wire brush have been employed, and each method has its advocates and its opponents.

The increase in the incidence of superficial fungus infections has brought forth a large number of fungicides with varying degrees of therapeutic efficency, some of which are particularly indicated for the treatment of the commonplace monilial infections of the skin.

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"The Treatment of Barbiturate Poisoning"**

James E. Eckenhoff, M.D., Philadelphia, Pennsylvania

Associate Professor of Anesthesiology, University of Pennsylvania

Patients suffering from barbiturate or other narcotic poisoning present the same basic problems as do patients anesthetized for surgical operations. Accordingly, they are liable to the same complications as might be seen in the unattended anesthetized patient. These are: Respirator obstruction from tissue relaxation or accumulation of secretions, hypoxia, and circulatory collapse. Pulmonary infection and atelectasis occur as commonly in these patients as in the postoperative patient. Since the problems are so identical to those daily confronting the anesthesiologist, it is urged that he be called to assist in the care of these patients.

There is, of course, one fundamental difference in the narcotic poisoned patient as compared to the anesthetized patient. The former must metabolize, destroy, or excrete via the kidneys or bowel the offending agent—whereas the anesthetized patient can usually rid himself of a depressant drug simply by breathing. This does not, however, change the basic problem.

There are no data to indicate analeptic agents will lessen the mortality rate from barbiturate poisoning, nor even decrease the treatment period. The published data, however, do show that mortality from barbiturate poisoning is lowest when adequate supportive therapy is used without the incorporation of analeptics as adjuncts of treatment. Information is also available that there is considerable risk in the use of analeptics currently available for treating barbiturate poisoning.

11:30 **"Nodular and Ulcerative Lesions of the lower Extremities"**

Paul A. O'Leary, M.D., Rochester, Minnesota

Editor-in-Chief of A.M.A. Archives of Dermatology and Syphilology; Professor of Dermatology and Syphilology, Mayo Foundation; Senior Consultant, Section of Dermatology and Syphilology, Mayo Clinic

Nodular and ulcerative lesions of the lower leg consist of approximately thirty-five different types, many of which are difficult to distinguish clinically and need laboratory evidence to make the diagnosis.

The discussion will include lantern slides illustrating many of the various types.

12:00 **END OF FIFTH ASSEMBLY**

FRIDAY NOON

(No Luncheons)

October 1, 1954

12:00 noon to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: C. A. Payne, M.D., Grand Rapids

Participants: Tague C. Chisholm, M.D., Israel Davidsohn, M.D., J. E. Eckenhoff, M.D., Walter A. Fansler, M.D., L. Emmett Holt, M.D., Robert L. Levy, M.D., Paul A. O'Leary, M.D., Francis E. Senear, M.D., Isidore Snapper, M.D., and Chris J. D. Zarafonetis, M.D.

FRIDAY AFTERNOON

October 1, 1954

Sixth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Chairman: Arch Walls, M.D., Detroit
Secretary: Ferdinand Gaensbauer. M.D., Pontiac

P.M.

2:00 **"Hodgkin's Disease"**

Israel Davidsohn, M.D., Chicago, Illinois
Professor and Chairman, Department of Pathology, Chicago Medical School; Director of Laboratories, Mt. Sinai Hospital; Director of Research, Mt. Sinai Medical Research Foundation, Chicago

There is a tendency to relegate Hodgkin's disease to the specialist. An attempt will be made in this presentation to show that the general practitioner has a unique opportunity to make a significant contribution to the management of this disease, mainly by helping in its early recognition.

Contrary to the generally prevalent opinion, the outlook in Hodgkin's disease is not hopeless, at least not in all cases. Early, energetic and persistent treatment has much to offer. For that reason, early diagnosis is extremely important. The definitive diagnosis of Hodgkin's disease is the responsibility of the pathologist. However, familiarity with the early clinical manifestations will enable the general practitioner to suspect the disease in most cases and to institute the necessary preliminary steps which will lead to the correct diagnosis and therapy.

The gross and microscopic pathologic changes in Hodgkin's disease will be discussed and correlated with the clinical picture and with various lesions which have to be considered in the differential diagnosis. Hodgkin's disease has a characteristic natural history in most cases. However, the task becomes complicated when one encounters the unusual atypical cases. Some of them progress rapidly to termination, others are slow, mild, relatively benign and offer a good opportunity for judicious management.

Familiarity with the gross and microscopic tissue changes helps to understand this complex disease. An attempt will be made to present our present-day knowledge of the disease and to venture into regions where research is trying to establish new beachheads.

2:30 **"Restrictions for Cardiacs—Necessary and Needless"**

Robert L. Levy, M.D., New York, New York
Professor of Clinical Medicine, College of Physicians and Surgeons, Columbia University; Attending Physician, Presbyterian Hospital, New York

In the management of the patient with heart disease it is of first importance to outline a regimen for daily living. Precision in this aspect of therapy is essential and none of the individual's activities is too trivial for consideration. Attention to detail often determines the success or failure of the program. The matters to be stressed will vary with the type and severity of the cardiac disorder, with social and economic status and with the interests and capabilities of the person concerned. Modification in his usual habits may be indicated; but unnecessary restrictions frequently are imposed by the physician and sometimes result in harm, hardship and unhappiness.

Among the items to be discussed are bed rest, exercise, work, diets low in fat, cholesterol and sodium, smoking, ascent of stairs, air travel, and the significance of changes in the form of the electrocardiogram in relation to management.

The reasons for the doctor's readiness to impose restrictions are considered.

In making recommendations for the cardiac patient the viewpoint must include practicability and realism as well as strictly medical considerations. In his efforts to add length to life the physician should not, without sound cause, curtail its breadth.

3:00 **FINAL INTERMISSION TO VIEW EXHIBITS**

3:30 **(Title to be announced)**

Isidore Snapper, M.D., Brooklyn, New York
Director of Medicine and Medical Education, Bethel Hospital, Brooklyn, New York

4:00 **"Para-Aminobenzoic Acid in the Treatment of Scleroderma and Other Disorders Associated with Excessive Fibrosis"**

Chris J. D. Zarafonetis, M.D., Philadelphia, Pennsylvania
Associate Professor of Internal Medicine; Chief Hematology Division, Temple University School of Medicine

Scleroderma, or diffuse systemic sclerosis, is a challenging disease. Its etiology is unknown, its pathogenesis poorly understood, and treatment has been unsatisfactory. The disease often causes profound disability and the fatality rate is high. For this reason, it is believed appropriate to summarize at this time the results obtained in forty-three cases of scleroderma which have been treated with salts of para-aminobenzoic acid during the past six years. There was no selection of cases in this series, every patient being treated regardless of the severity of the disease. Some had had previous sympathectomy, and others extensive trials of cortisone, ACTH, or testosterone without benefit.

Medication consisted of potassium para-aminobenzoate (KPAB), 12 gm daily, orally in the form of a 10 per cent solution.

Moderate to marked improvement in skin texture was observed in thirty-six patients.

Aside from appropriate dosage, duration of therapy exerts a major influence on the result. Indeed, twenty-seven of the patients in the moderate and marked improvement categories were treated for from six months to more than two and one half years.

A major difficulty in the management of scleroderma is the problem of overcoming pericapsular and other fibrous tissue shortening which gives rise to contraction deformities. With co-operative patients, the supplemental use of dynamic traction splints has produced progressive stretching of the affected parts.

Thus, in the current management of scleroderma, KPAB is administered in adequate doses over long periods of time, physiotherapy is instituted whenever possible, and dynamic traction splints are applied when indicated after skin softening has begun.

The observation that KPAB therapy reverses to varying degrees the fibrosis of scleroderma suggested its use in other disorders associated with excessive fibrosis. Morphea, or localized scleroderma, softened markedly in each of six cases treated with KPAB. Similarly, Dupuytren's con-

tractures have softened and essentially normal extension of the fingers has been achieved through the combined use of KPAB therapy and dynamic traction splints. Chronic leg and other skin ulcers which have a large component of fibrosis have also improved or healed completely with the addition of KPAB therapy to the management program. Preliminary observations suggest that selected cases of pulmonary fibrosis and burn patients may be benefited by the judicious use of KPAB.

Examples of results achieved in the above disorders will be illustrated. In addition, reference will be made to method of administration of KPAB, contraindications, toxicity, and possible modes of action.

4:30 **"Accidents in Childhood—The No. 1 Killer"**

Tague C. Chisholm, M.D., Minneapolis, Minnesota

Clinical Assistant Professor of Surgery, University of Minnesota Medical School

Medicine's accomplishment in reducing deaths in childhood due to tuberculosis, diphtheria, small pox, and many other diseases is a splendid one; our record of reducing the mortality from accidents is woefully deficient. In fact, the sum of deaths in children from polio, cancer, heart disease, malformations and communicable diseases just about equals the number of deaths from accidents. Accidents constitute the No. 1 killer of children in the United States.

The statistical significance of accidents as a killer of children is striking. Illustrations of the various types of accidents which reach into every physician's family life are common. What is being done to meet this challenge in other communities is reviewed. What each physician must do in his community, large or small, needs emphasis.

Are you using the new safety vaccine?

5:00 **END OF SIXTH ASSEMBLY**

SECTION ON MEDICINE

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: C. K. Stroup, M.D., Flint

Secretary: J. R. Brink, M.D., Grand Rapids

(Title to be announced)

Isidore Snapper, M.D., Brooklyn, New York

SECTION ON PATHOLOGY

3:00 to 5:00 p.m.

Founders Room, Sheraton-Cadillac Hotel

Chairman: C. Allen Payne, M.D., Grand Rapids

Slide Seminar: **"Benign Lesions of the Lymph Nodes"**

Israel Davidsohn, M.D., Chicago, Illinois

——Program of Sections——

FRIDAY

October 1, 1954

5:00 to 6:00 p.m.

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Parlors G-H-I, Sheraton-Cadillac Hotel

Chairman: C. J. Courville, M.D., Detroit

Secretary: Coleman Mopper, M.D., Detroit

"Localized Types of Scleroderma"

Paul A. O'Leary, M.D., Rochester, Minnesota

The localized forms of scleroderma vary from small individual discrete lesions to lesions involving an entire extremity or even two extremities. They vary also in the degree of pigmentary changes as well as in the degree of cutaneous sclerosis.

The discussion will illustrate the various forms of localized scleroderma.

SECTION ON ANESTHESIOLOGY

Pan American Room, Sheraton-Cadillac Hotel

Chairman: E. D. Conner, M.D., Detroit

"Physiology of Barbiturate Metabolism"

J. E. Eckenhoff, M.D., Philadelphia, Pennsylvania

The commonly used barbituric acid derivatives are more soluble in fat than in other tissues. Significant quantities of barbiturates used for anesthesia can, therefore, be taken up by fat, and be slowly released over a period of hours, thus prolonging narcosis. The quantity of thiopental in the tissues as compared with that in the blood may be influenced by blood pH. Thus, during periods of carbon dioxide accumulation or in acidosis, a greater portion of thiopental may be in solution in the blood and less in the tissue, resulting in a corresponding lighter plane of anesthesia than anticipated. Some clinical studies have indicated a decrease in the total amount of thiopental needed for maintenance of anesthesia for abdominal surgery when respiration was controlled and a lower pCO2 maintained. The metabolic breakdown of thiopental occurs at a steady rate, about 15 per cent per hour, whereas pentobarbital is transformed much slower at a rate of 4 per cent per hour.

6:00 **END OF SCIENTIFIC ASSEMBLY AND OF THE 1954 ANNUAL SESSION**

Technical Exhibits

Abbott Laboratories — **Booth No. 55**
North Chicago, Illinois

BLUTENE® Chloride (Tolonium Chloride, Abbott), an orally-administered nonhormonal agent for treatment and prevention of functional uterine bleeding (monometrorrhagia). BLUTENE'S chemical structure is totally unrelated to estrogens. Symptoms usually are relieved with only one 100-mg. tablet taken with meals at the time of bleeding. One course of treatment usually controls symptoms, but, in long-standing cases of abnormal uterine bleeding, treatment may extend over two or three menstrual periods.

Alkalol Company — **Booth No. 98**
Taunton, Massachusetts

The Alkalol Company, Taunton, Massachusetts, will feature Alkalol, the balanced, alkaline, saline solution for the treatment of mucous membranes and irritated tissues. It is bland, non-toxic, and effective, and has been a favorite since 1896. We are also showing Irrigol, a powder which in solution makes an aseptic, slightly astringent vaginal douche. It is widely used also for colonic irrigations and as an effective rectal enema.

A. S. Aloe Company — **Booth No. 73**
St. Louis, Missouri

Visit Booth No. 73 where your Aloe representative will show you a cross section of the complete line of physicians' equipment and supplies carried by the A. S. Aloe Company of St. Louis. Highlighted will be New Model Steeline—tomorrow's treatment room furniture today—featuring the body contour table top, magnetic door catches, and advanced design all in new decorators' colors.

American Hospital Supply Corporation — **Booth No. 48**
Evanston, Illinois

Scientific Products Division, American Hospital Supply Corporation, will have on display the complete line of Baxter intravenous solutions and accessory sets, including the new electrolyte solutions, as well as Gentran, an effective, proven plasma volume expander for use in the treatment of shock, and the new Plexitron Blood Pump for safe, rapid pressure transfusions with expendable equipment.

Ames Company, Inc. — **Booth No. 40**
Elkhart, Indiana

CLINITEST, for urine-sugar, is standardized. This assures uniformly reliable results whenever and wherever a test is performed—office, ward, clinic, or patient's home. Standardization not only curtails error, but saves personnel's time by elimination of preparing and mixing of reagents.
ACETEST for acetonuria, BUMINTEST for albuminuria, HEMATEST for occult blood, and ICTOTEST for bilirubin will also be on display.

Armour Laboratories — **Booth No. 52**
Kankakee, Illinois

The Armour Laboratories booth will feature ACTHAR and HP ACTHAR Gel as well as other important products of Armour's manufacture. The Armour Laboratories representatives will be happy to discuss these products with anyone who wishes to stop at our booth.

Ayerst Laboratories — **Booth No. 57**
New York, New York

We take great pleasure is extending a cordial invitation to all physicians to visit the Ayerst booth No. 57. Your Ayerst representative welcomes this opportunity to discuss with you any of our products in which you may be particularly interested. Any inquiries relative to "Premarin" with Methyltestosterone, "Kerodex," "Clusintrin," or other Ayerst specialties of interest to you will be welcomed.

Baby Development Clinic — **Booth No. 92**
Chicago, Illinois

Maternity Counselling Service offers demonstration material to aid in teaching expectant mothers: care and support of breast: support of abdomen and relief of back strain; personal cleanliness. Preparation for infant and child care aids on bath; feeding; toileting; as well as care of feet. Material also available for well baby conferences.

Baker Laboratories,, Inc. — **Booth No. 27**
Cleveland, Ohio

You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display.
Baker representatives will be glad to discuss the practical application of Grade A milk, adjusted fat composition, zero curd tension, synthetic vitamins, and other important factors which help to eliminate many of the problems in modern infant feeding.

Bard-Parker Company, Inc. — **Booth No. 19**
Danbury, Connecticut

RACK-PACK . . . the new method of packaging B-P RIB-BACK Surgical Blades. Now in a matter of seconds, blades are ready for sterilization. Saves time and labor in the O.R., and protects against costly, accidental damage to sharp edges. Also knife handles, B-P Germicide, Chlorophenyl, sterilizing containers, transfer forceps, Pipettes, and The Reese Dermatome.

Barry Laboratories, Inc. — **Booth No. 94**
Detroit, Michigan

Barry Laboratories presents a complete line of allergy preparations for testing and treatment with a display of the various Barry allergy testing sets for physicians offices. Also displayed are the Barry line of quality parenteral preparations.

Beech-Nut Packing Company — **Booth No. 51**
New York, New York

The Borden Company — **Booth No. 58**
New York, New York

There's no better place to talk over the latest information on infant feeding than the Borden Prescription Products booth. On display is the complete line of Borden's infant formula products for every feeding purpose or preference. You can feed almost any baby BREMIL, MULL-SOY, DRYCO, or BIOLAC.

Brooks Appliance Company — **Booth No. 18**
Chicago, Illinois

The Brooks Appliance Company will exhibit and describe in detail the technique of applying the combination pressure bandages. The moist medicated

Primer Bandage plus the Dalzoflex Elastic Adhesive Bandage which are used in treating leg ulcers and phlebitis. Elastic Stockings, the Nulast Elastic Crepe Bandages and Surgical Instruments will also be displayed.

Burdick Corporation **Booth No. 85**
Milton, Wisconsin

Burdick Physical Medicine Equipment to be exhibited will include their improved Electro-cardiograph; their new portable short wave unit, and The G. A. Ingram Company, their distributor, expects to have their new Microwave unit on display also.

Burroughs Wellcome & Co. (U.S.A.) Inc. **Booth No. 64**
Tuckahoe, New York

"NEOSPORIN"® brand Polymyxin B—Bacitracin-Neomycin *ANTIBIOTIC OINTMENT.*
Wherever there is topical bacterial infection.
"MAREZINE"® Hydrochloride brand Cyclizine Hydrochloride Controls:—
Nausea and vomiting of pregnancy.
Motion sickness.
Vertigo.

Carnation Company **Booth No. 47**
Los Angeles, California

You are cordially invited to visit Booth 47 where you will see an attractive Animated Display illustrating the reasons why Carnation Evaporated Milk deserves consideration as your first choice for infant formulas. Carnation Medical Specialists will answer all questions on our sole processing and sterilization techniques.

Ciba Pharmaceutical Products, Inc. **Booth No. 3**
Summit, New Jersey

The CIBA exhibit will feature SERPASIL, a pure crystalline alkaloid of Rauwolfia possessing the essential antihypertensive actions of the whole root. SERPASIL offers mild, gradual, sustained lowering of blood pressure with a slowing of the heart rate; a tranquilizing effect beneficial in most cases of hypertension; and unvarying potency.

Coca-Cola Company **Booth No. 96**
Atlanta, Georgia

Ice cold Coca-Cola served through the courtesy and coöperation of the Coca-Cola Bottling Company of Detroit and The Coca-Cola Company.

Desitin Chemical Company **Booth No. 26**
Providence, Rhode Island

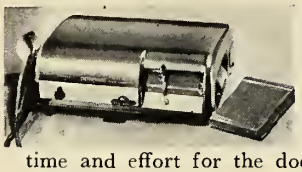
This exhibition features Desitin ointment, external cod liver oil therapy, and its adjuvant Desitin powder. The ointment combines crude high potency Norwegian cod liver oil, zinc oxide and talcum in a modified lanolin petrolatum base. It is indicated in postoperative dressings, slow healing wounds, burns of all degrees, etc.

Detroit Creamery Company **Booth No. 99**
Detroit, Michigan

Sealtest DAIRY PRODUCTS

You are invited to visit Booth No. 99 and enjoy a complimentary bottle of Sealtest Milk. Look for the red and white symbol denoting quality and purity in Dairy Products.

Dictaphone Corporation **Booth No. 14**
Detroit, Michigan



Try *two* new ways with words featuring the famous plastic Dictabelt record.
ONE.—Individual Dictaphone Time-Master dictating machine — saving time and effort for the doctor and for the nurse-secretary.
TWO.—The Dictaphone Telecord System for hospitals —extending dictating facilities throughout the building—channeling all dictation to a centralized recording machine for immediate transcription.

Dietene Company **Booth No. 54**
Minneapolis, Minnesota



Have YOU tasted MERITENE . . . the whole protein supplement that DOES taste good? Visit our booth, enjoy a Meritene Milk Shake with its multiple nutritive values. Ask, too, about SAFE WEIGHT REDUCTION with the Dietene Diet (based on DIETENE® the only AMA "Council-Accepted" Reducing Supplement).

Doho Chemical Corporation **Booth No. 10**
New York,, New York

Doho Chemical Corporation exhibits AURALGAN, the time-honored decongestant and pain reliever in Otitis Media, also for removal of Cerumen; RHINALGAN, the equally safe nasal decongestant for infants and the aged; NEW OTOSMOSAN, the fungicidal and bactericidal ear medication.
Mallon Chemical Corporation, a subsidiary, features RECTALGAN, the liquid topical anesthesia for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

Eaton Laboratories, Inc. **Booth No. 6**
Norwich, New York

For prompt results in urinary tract infections, Furadantin may now be administered in either tablet form or as Furadantin Pediatric Suspension N.N.R. Within 30 minutes after ingestion of the drug, the urine becomes strongly antibacterial. Furadantin's wide range of effectiveness and lack of serious side effects offer additional important advantages.

Eisele & Company **Booth No. 30**
Nashville, Tennessee

Eisele & Company will display their regular line of clinical thermometers, hypodermic syringes, both the regular type and interchangeables; hypodermic needles, Eco bandages, and specialty glassware.

Encylopedia Americana **Booth No. 38**
Grand Rapids, Michigan

We will display our 1954 edition of Encyclopedia Americana—the ultimate of our 125-year History—ask any librarian or teacher. We are world-wide in scope yet American in spirit. The above together with our Book of Knowledge are included in one exhibit. Combination offer keyed to our American education school system.

Farnsworth Laboratories, Inc. **Booth No. 17**
Chicago, Illinois

DIPROFARN—The non-narcotic, non-steroid analgesic, antipyretic and anti-rheumatic. Normally complete relief from pain is anticipated within minutes following injection; patients remain awake and able to co-operate.

QUINOCAINE—the prolonged local anesthetic.
COLMETANESE—widely used in mixed infections and brucellosis.

The WAITE PROGRAM—for the treatment of obesity, excessive weight considered as a health problem.

Fellows Medical Mfg. Company, Inc. **Booth No. 70**
New York, New York

RECTULES CHLORAL HYDRATE, Fellows new Chloral Hydrate Suppositories will be featured. Rectules Chloral Hydrate contain 20 grains of chloral hydrate in a non-irritating specially prepared base. Particularly useful in geriatrics and gastro-intestinal disturbances.
FELSULES Chloral Hydrate will also be shown. Felsules Chloral Hydrate now identifies the ORIGINAL Fellows Chloral Hydrate Capsules; available in two strengths: 3¾ gr. Felsules Chloral Hydrate for daytime sedation; 7½ gr. for restful sleep.
Representatives at the booth will be pleased to give you more information on RECTULES Chloral Hydrate.

Ferguson Manufacturing Company **Booth No. 68**
Grand Rapids, Michigan

DRICO plastic panties give children and adults with a WEAK BLADDER or bowel a new outlook on life because they give them day and night protection from embarrassing accidents. See the "BEDDI-PANTI" for bedridden patients, the "PULL-ON-PANTI" for night bed-wetters, the "AMBI-PANTI" for daytime problems and the "COLOSTOMI-PANTI" for Colostomy and Ileostomy patients in Booth 68. Manufactured by the Ferguson Manufacturing Company, Grand Rapids, Michigan.

H. G. Fischer & Company **Booth No. 8**
Detroit, Michigan

Latest models of Modern X-ray, F.C.C. approved Physical Medicine and Rehabilitation Equipment, all of highest quality materials and construction, will be on display. Representatives in attendance will welcome an opportunity to give demonstrations and quote today's low prices. Your visit will be appreciated.

C. B. Fleet Company, Inc. **Booth No. 7**
Lynchburg, Virginia

During the past fifty years PHOSPHO-SODA (Fleet) has been a symbol of elegance in sodium phosphate medication. FLEET ENEMA DISPOSABLE UNIT—an enema solution of Phospho-Soda (Fleet)—is a worthy companion product. The single use unit simplifies and assures satisfying preparation for proctoscopy and, as a routine enema, it is a boon to the hospitalized patient.

Flint, Eaton & Company **Booth No. 41**
Decatur, Illinois

Flint, Eaton presents Ferrolip, a new chelate complex of iron.
Chelated iron, as in Ferrolip, is resistant to all usual chemical forces serving to precipitate iron and to produce iron intolerance; yet the chelated iron in Ferrolip is completely soluble and readily available for uptake along the entire gastrointestinal tract.
Visit the Flint, Eaton & Company booth to hear of chelation as it applies to iron therapy.

Freeman Manufacturing Company **Booth No. 9**
Sturgis, Michigan

For more than sixty years Freeman has been engaged in making surgical supports and elastic hose. During that time we have worked closely with members of the medical profession. Their assistance has proved invaluable in enabling us to maintain the highest standards of quality and design.
We particularly invite your inspection of our complete line of orthopedic supports being exhibited at the show.

Geigy Pharmaceuticals **Booth No. 44**
New York, New York

The Geigy Exhibit features Council-accepted BUTAZOLIDIN® (brand of phenylbutazone), an orally effective compound which has achieved great clinical success in the treatment of rheumatoid disorders. Also on display will be Council-accepted TROMEXAN®, an oral anticoagulant of rapid action and little cumulation; EURAX® Cream and EURAX® Lotion, a long-acting, non-sensitizing, antipruritic and scabicide, PANPARNIT®, indicated for symptomatic relief of Parkinson's Disease and STEROSAN® Cream and STEROSAN® Ointment, a bacteriostatic and fungistatic agent for the local treatment of pyogenic and mycotic skin disorders.

General Electric Company **Booth No. 72**
Detroit, Michigan

X-Ray Department, General Electric Company, manufacturers of complete X-Ray equipment from portable diagnostic to 2,000,000-volt therapy apparatus—electrocardiograph—diathermy—X-Ray accessories and supplies. Whatever your needs, you can put your confidence in General Electric.

Gerber Products Company **Booth No. 34**
Fremont, Michigan



WHEN MILK IS CONTRAINDICATED as the basic food for infants, Gerber's "Meat Base Formula" can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate "Meat Base Formula" and the complete line of supplementary baby foods.

Harrower Laboratory, Inc. **Booth No. 62**
Jersey City, New Jersey

This display features Calcisalin, a prenatal dietary supplement formulated according to a new principle, which provides that maximum assimilation of calcium in the prenatal diet can be achieved through use of a phosphorus-free form of calcium. In Calcisalin, calcium lactate replaces dicalcium phosphate; aluminum hydroxide gel removes excess dietary phosphorus from the intestinal tract; iron and vitamins are included according to recommendations of the National Research Council.

J. F. Hartz Company **Booth Nos. 49, 50**
Ferndale, Michigan

A selection of Swedish stainless steel instruments, the latest in diagnostic and treatment equipment and instruments, as well as our line of fine pharmaceuticals, will be on display in the booth of The J. F. Hartz Company at the 89th Annual Session and Exhibition of the Michigan State Medical Society.

H. J. Heinz Company **Booth No. 53**
Pittsburgh, Pennsylvania

Heinz is now packing Strained Meats in Glass Jars. Five varieties—Strained Beef, Lamb, Liver, Beef Heart and Liver and Bacon are now available.
Stop at the Heinz booth and see these new varieties, and look over the material made available for physicians and mothers.

Hoffmann-La Roche, Inc. Booth No. 82
Nutley, New Jersey

You will find three products of special interest to the surgeon featured in the Roche display: the synthetic narcotic, LEVO-DROMORAN for relief of severe pain; the soluble, sulfonamide GANTRISIN for antibacterial action and the new chemical compound ILIDAR which is particularly valuable in vasospasm and related peripheral vascular disorders.

Holland-Rantos Co., Inc. Booth No. 33
New York, New York

Physicians interested in Medical Contraception are cordially invited to discuss with HR representatives the latest information on clinical and laboratory data concerning the efficacy of KOROMEX products, as well as merits of NYLMERATE preparations in treatment of vaginal trichomoniasis and moniliasis.

G. A. Ingram Company Booth No. 84
Detroit, Michigan

The G. A. Ingram Company will exhibit the latest in examining room equipment as well as all the new items in diagnostic, orthopedic and specialty instruments.

C. B. Kendall Company Booth No. 78
Indianapolis, Indiana

COCURON—The cobalt-copper-iron tablet that in a week's dosage produces a red cell increase equivalent to that obtained from a whole blood transfusion—will be exhibited and discussed by Kendall representatives. BANESIN—The euphoric, analgesic that represents one of the most widely applicable agents for the relief of pain and tension, will also be exhibited.

Kremers-Urban Company Booth No. 74
Milwaukee, Wisconsin

Welcome to the K-U booth. New medications featured will be KUSED for sedation all along the line; SALIMEPH-C for relief of the pain-spasm cycle in rheumatoid arthritis and related conditions; OB-6, the complete vitamin-mineral pregnancy supplement with protection against pregnancy toxemias.

A. Kuhlman & Company Booth No. 1
Detroit, Michigan

The A. Kuhlman & Company invites you to see our display of new colors in steel and wood medical furniture. We will also be showing a line of diagnostic and surgical instruments.

We will welcome the opportunity to offer our assistance in replanning an office or adding anything to what you now have.

Lea & Febiger Booth No. 87
Philadelphia, Pennsylvania

Be sure to see these new books and new editions: Bonica—The Management of Pain; Ziskind—Psychophysiologic Medicine; Pullen—Pulmonary Diseases; Twiss and Oppenheim—Practical Management of Disorders of the Liver, Pancreas and Biliary Tract; Ormsby and Montgomery—Diseases of the Skin; Bailey—Surgery of the Heart; Forsee—Surgery of Pulmonary Tuberculosis; Bellet—Clinical Disorders of the Heart Beat; Schroeder—Hypertensive Diseases; Fishberg—Hypertension and Nephritis; Moritz—Pathology of Trauma; and other books of current clinical importance.

Lederle Laboratories Booth No. 91
Pearl River, New York

You are cordially invited to visit our exhibit in Booth No. 91 where you will find our representatives prepared to give you the latest information on LEDERLE products.

Liebel-Flarsheim Company Booth No. 5
Cincinnati, Ohio

THE LIEBEL-FLARSHEIM COMPANY, Cincinnati, Ohio, manufacturers of electromedical equipment for over thirty-five years, cordially invites you to visit booth No. 5 in which their latest short-wave diathermy and Bovie electrosurgical apparatus will be available for examination and demonstration. Capable representatives will be on hand at all times, and we hope you will stop by so that we may become acquainted.

Eli Lilly & Company Booth No. 71
Indianapolis, Indiana

You are cordially invited to visit the Lilly exhibit located in Booth No. 71. The display will contain information on recent therapeutic developments and will feature the story of the Lilly Junior Taste Panel. Lilly sales people will be in attendance. They welcome your questions about "Ilotycin" (Erythromycin, Lilly) and other Lilly products.

J. B. Lippincott Company Booth No. 93
Philadelphia, Pennsylvania

J. B. Lippincott Company presents for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

P. Lorillard Company Booth No. 29
New York, New York

P. Lorillard Company, manufacturers of OLD GOLD and EMBASSY Cigarettes as well as BRIGGS Pipe Mixture and other famous tobacco products will exhibit and demonstrate their new KENT Cigarettes with the exclusive Micronite Filter, which takes out up to seven times more nicotine and tars than other filter cigarettes.

M & R Laboratories, Inc. Booth No. 11
Columbus, Ohio

Your SIMILAC representatives are happy to take part in this meeting. They are pleased to have the opportunity to discuss with you the role of SIMILAC in infant feeding. They have for you the latest Pediatric Research Conference Reports. Also available are current reprints of pediatric nutritional interest.

Maico Hearing Service Booth No. 86
Detroit-Flint-Grand Rapids-Lansing

Ninety per cent of all the precision hearing test instruments used by hospitals, schools and physicians in the United States are Maico. The new Maico Transistor hearing aid weighs only one ounce complete and is designed to be worn in a lady's hair. It is no longer necessary to have cords or wires on the neck or body.

S. E. Massengill Company Booth No. 31
Bristol, Tennessee

You are invited to visit the S. E. Massengill Company booth. Adrenosem, the new Massengill systemic hemo-

static, is featured. Adrenosem is specific in treating those conditions characterized by increased capillary permeability. Our representatives will be glad to discuss with you the latest information and clinical evaluations of this product.

McNamara Medical Equipment Co. **Booth No. 79**
Detroit, Michigan

We are here to demonstrate for you the PAUST Electronic Stimulator. This instrument is designed to give the GENERAL PRACTITIONER—PHYSIATRIST — ORTHOPEDIST — HOSPITAL — FIRST AID DEPARTMENT and PHYSICAL THERAPIST an adjunctive therapeutic device which has *proven itself invaluable* in the relief of acute muscle spasm, strains, sprains, dislocations and post fracture rehabilitation. We will be pleased to serve you.

Mead Johnson & Company **Booth No. 88**
Evansville, Indiana



Mead Johnson & Company will display the following products: Lactum (powdered and liquid forms), Mead's nutritionally sound formula for infants; Liquid Sobee, a hypoallergenic soya formula (milk-free); Lytren, oral electrolytes; Poly-Vi-Sol; Tri-Vi-Sol; and Mulcin.

Medical Arts Supply Company **Booth No. 77**
Grand Rapids, Michigan

In booths occupied by Medical Arts Supply Company of Grand Rapids, you will find many new things of interest to the Medical Profession.
The boys from Medical Arts cordially invite you to visit them during the days of the convention.

Medical Protective Company **Booth No. 60**
Fort Wayne, Indiana

Exclusive Application to Professional Liability Insurance—distinctive of The Medical Protective Company —assures proven protection for the doctor under which policyholders suffer no involuntary loss from their own pockets in the payments of damages. In fact, in 1953 99.94 per cent of all our policyholders were completely covered under $2500.

Wm. S. Merrell Company **Booth No. 21**
Cincinnati, Ohio

TACE, the unique non-steroid developed by Merrell, *offers a new approach to the treatment of the menopause.*

TACE is temporarily stored in body fat, and released over an extended period of time. One course of TACE therapy is generally all that is required to ease many patients into the symptom-free postmenopausal period. Symptom relief is excellent, and side effects are virtually absent.

Merrell professional service representatives will be present to answer any questions you may have concerning this new and distinctive estrogen. They will be happy to discuss other Merrell specialties as well.

Meyer Chemical Company, Inc. **Booth No. 66**
St. Clair Shores, Michigan

The Meyer Chemical Co., Inc., cordially invites you to visit their exhibit where several products of recent development will be featured. Almesed capsules, L. A. a revolutionary form of autonomic blocking therapy, will be featured. Almesed, L. A. will supply even, prolonged, medication lasting twelve hours so that a capsule taken morning and night will provide the patient with medication for a twenty-four-hour period.

Michigan Medical Service **Booth No. 4**
Detroit, Michigan

The Blue Shield exhibit exemplifies the prepayment plan sponsored by the doctors in Michigan and what that plan means to the people of the State. The family scene is typical of a family who have been relieved of the worry of catastrophic medical bills.
The photograph of the doctor and the child which makes up the Blue Shield portion of the exhibit, is symbolic of the co-operation of the doctors of Michigan. Through that co-operation Blue Shield in Michigan has led the nation in meeting the needs of the public.

Miller Surgical Company **Booth No. 67**
Chicago, Illinois

MILLER SURGICAL COMPANY, Chicago, Ill., will show the Miller Electro-scalpel. This unit cuts, desiccates, fulgurates, coagulates and is used for most delicate work up to light major surgery. Accessories such as Snares, Smoke Ejectors, etc., also available. A Complete Line of Diagnostic Equipment consisting of Illuminated Otoscopes, Ophthalmoscopes, Eyespud with Magnet, Transillumination Lamps, Headlights, Vaginal Speculum with Smoke Ejector, and Gorsch Operating Scopes, and Stainless Steel Proctoscopes all sizes with magnification, Suction Tubes, and Grasping Forceps.

National Drug Company **Booth No. 63**
Philadelphia, Pennsylvania

You are cordially invited to visit the booth of The National Drug Company. The featured product will be Parenzyme (intramuscular) trypsin. This product introduces a new era in medicine, that of Clinical Enzymology. Parenzyme (intramuscular) trypsin is a sesame oil suspension of the proteolytic enzyme trypsin that produces rapid, dramatic reduction in acute local inflammation in Phlebitis (thrombophlebitis and phlebothrombosis); Ocular Inflammation (iritis, iridocyclitis and chorioretinitis); Traumatic Wounds. Also effective in the treatment of Leg Ulcers (varicose and diabetic).

Nepera Chemical Company, Inc. **Booth No. 46**
Yonkers, New York

The Nepera exhibit features Biomydrin, a new nasal spray which has been reported to be "effective as an antibiotic in clearing the nose of pathogenic organisms and purulent secretions."

Also featured is a new drug which represents a major advance in oral theophylline therapy. Whenever the pharmacologic effects of oral xanthine are indicated, Choledyl assures higher theophylline blood levels, greater effectiveness, and superior patient tolerance.

Two other preparations will be exhibited: Mandelamine, urinary antiseptic; and Neohetramine, antihistaminic.

Wm. R. Niedelson Company **Booth No. 95**
Detroit, Michigan

Models of the Jones Metabolism unit, the "AIR-BASAL," the newest advance in BMR testers requiring NO oxygen tank will be shown.
The new model improved CARDIOTRON direct-writing Cardiograph with rectilinear response will be demonstrated.
PROFEXRAY equipment and accessories.

Noble-Blackmer, Inc. **Booth No. 12**
Jackson, Michigan

Your friendly representatives from Jackson will again be in attendance at your Convention. Stop in our booth and let Bill Farrand, Bob Townsend, John Janus or Joe Loeher show you the latest Hamilton furniture, Castle and Pelton autoclaves and lights. Also be sure and get the latest information on ultrasonic therapy.

Ortho Pharmaceutical Corporation **Booth No. 76**
Raritan, New Jersey

ORTHO cordially invites you to visit their exhibit at booth 76. The Ortho display will feature PRECEPTIN® vaginal gel, their product for conception control designed for use without a vaginal diaphragm. Preceptin vaginal gel has achieved an outstanding record of clinical effectiveness and has been widely acclaimed by the medical profession. Your inquiries on Preceptin vaginal gel are invited.

Parke, Davis & Company **Booth No. 16**
Detroit, Michigan

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products. Important specialties, such as Penicillin S-R, Benadryl, Ambodryl, Dilantin Suspension, Milontin, Vitamins, Amphedase, Oxycel, Thrombin Topical, etc., will be featured. You are cordially invited to visit our exhibit.

Pelton & Crane Company **Booth No. 80**
Detroit, Michigan

Pet Milk Company **Booth No. 15**
St. Louis, Missouri

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk in infant feeding and "Pet" Nonfat Dry Milk in special diets. A miniature can of Pet Evaporated Milk will be given to all visitors.

Procter & Gamble Company **Booth No. 20**
Cincinnati, Ohio

Ivory Soap (Procter & Gamble) offers a series of time-saving leaflet pads for doctors, each pad containing fifty identical tear-out sheets. These sheets, which may be given to patients, contain routine instructions for care of acne, bathing a baby, bathing and caring for a bedfast patient, sick room precautions, and hygiene of pregnancy. There are also samples of other free, helpful material prepared especially for physicians. Mrs. Christyne Schwab, in charge.

Professional Management **Booth No. 83**
Battle Creek, Michigan

PM

PROFESSIONAL MANAGEMENT—with twenty years of specializing in The Business Side of Medicine—invites you to stop at Booth No. 83.
Offices in Battle Creek, Saginaw, Grand Rapids and Detroit.

The Quarry, Inc. **Booth No. 43**
Ann Arbor, Michigan

Randolph Surgical Supply Company **Booth No. 13**
Detroit, Michigan

R. J. Reynolds Tobacco Company **Booth No. 65**
Winston-Salem, North Carolina

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL; CAVALIER King Size; or WINSTON, the distinctive new king size, cork tip, filter cigarette.

Riker Laboratories, Inc. **Booth No. 69**
Los Angeles, California

RIKER LABORATORIES presents RAUWILOID, RAUWILOID + VERILOID, and RAUWILOID + HEXAMETHONIUM, three outstanding hypotensive agents. Also RAUWIDRINE, a more effective and better tolerated amphetamine therapy for mood elevation and appetite suppression. Visit Booth No. 69 for complete information.

A. H. Robins Company, Inc. **Booth No. 37**
Richmond, Virginia

Physicians attending the Michigan State Medical Society meeting are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company. Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins' prescription specialties.

J. B. Roerig & Company **Booth No. 36**
Chicago, Illinois

Information, samples and literature will be available on Tetracyn—the newest broad spectrum antibiotic, also our well-known nutritional products, such as Viterra, Viterra Therapeutic, Heptuna Plus, Amplus, Obron, Obron Hematinic, ASF, Roerig's Anti-Stress Formula, etc.

Sandoz Pharmaceuticals **Booth No. 59**
Hanover, New Jersey

Sandoz Pharmaceuticals cordially invites you to visit our display at the Michigan State Medical Convention —Booth No. 59
We plan to feature *new* information on certain established products and complete data on Fiorinal—the newest member in our family of ethical specialties in Cephalalgia therapy.

CAFERGOT Available in oral and rectal form for effective control of head pain in migraine and other vascular headaches.

HYDERGINE A vasorelaxant with central and peripheral action useful in hypertension and peripheral vascular disorders and geriatric conditions.

PLEXONAL Sandoz introduces a new sedative-hypnotic—Plexonal. This exhibit demonstrates that Plexonal is not just another sedative, but is one

developed on a new pharmacologic approach. The action of subthreshold doses of classic sedative agents are potentiated and enhanced by autonomic and central acting drugs.

FIORINAL A new approach to therapy of tension headaches and other head pain due to sinusitis and myalgia.

Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

W. B. Saunders Company **Booth No. 2**
Philadelphia, Pennsylvania

Once again Saunders will be on hand with their complete line. Among the newer titles a few are: Flint: Emergency Treatment and Management; Florey: Pathology; AMA: Anesthesia; and Nelson: Textbook of Pediatrics.

These and many more will be available for your inspection.

Schering Corporation **Booth No. 35**
Bloomfield, New Jersey

Members of the Michigan State Medical Society and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be featured.

Schering representatives will be present to welcome you and to discuss with you these products of our manufacture.

Julius Schmid, Inc. **Booth No. 39**
New York, New York

RAMSES Gynecological Products. Julius Schmid, Inc., have prepared an interesting and informative exhibit on their products—RAMSES Flexible Cushioned Diaphragm, RAMSES Vaginal Jelly and other RAMSES Gynecological Products all of which enjoy A.M.A. Council acceptance. Introduced to the medical profession more than three decades ago, the RAMSES line today is better than ever because of the firm's continuous research and improvement.

G. D. Searle & Company **Booth No. 22**
Chicago, Illinois

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine, and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

Sharp & Dohme, Inc. **Booth No. 24**
Philadelphia, Pennsylvania

The many indications for "Hydrocortone" or "Cortone" highlight the therapeutic importance of these hormones in everyday practice. Research data relative to more effective therapy when penicillin is used in conjunction with "Benemid" probenecid completes the exhibit. Expertly trained personnel solicit discussion on these observations.

Smith, Kline & French Laboratories **Booth No. 45**
Philadelphia, Pennsylvania

The S.K.F. booth will feature "Spansule"* sustained released capsules—the revolutionary new oral dosage form. Just one "Spansule" capsule, taken on arising, provides a uniform supply of medication throughout the day. Thus, "Spansule" capsules offer you three advantages: (1) smooth, uniform action, (2) prolonged therapeutic effect, and (3) convenient once-a-day dosage.

*"Spansule"-S.K.F. Trademark

E. R. Squibb & Sons **Booth No. 89**
New York, New York

At Booth 89, E. R. Squibb & Sons features Raudixin, the safe hypotensive agent. Raudixin contains the whole root of Rawolfia Serpentina accurately standardized for uniform hyptotensive effect. Our representative will be glad to discuss with you the advantages of Raudixin used alone or in combination with other drugs.

The Stuart Company **Booth No. 75**
Chicago, Illinois

Testagar & Company, Inc. **Booth No. 56**
Detroit, Michigan

Testagar & Co., Inc., will feature their newest development—Timed Amodex Capsules, which contain Dextro-Amphetamine Hydrochloride, 15 mg. and Amobarbital 60 mg., in tiny pellets having varying disintegrating and absorption times. Timed Amodex Capsules provide sustained prolonged therapeutic effect without nervous excitation to elevate the mood, relieve nervous tension and control of appetite in the management of obese patients. Timed Amodex Capsules are available everywhere and are economical to the patient.

The Upjohn Company **Booth No. 25**
Kalamazoo, Michigan

The Upjohn exhibit will feature CORTEF, brand of hydrocortisone. Reports from clinicians and practioners reveal dramatic results in the use of CORTEF where cortisone is indicated. CORTEF is available in tablet or ointment form for oral or topical use. Upjohn representatives will welcome the opportunity to furnish additional information to the profession.

U. S. Vitamin Corporation **Booth No. 97**
New York, New York

Exhibit features VI-AQUAMIN THERAPEUTIC . . . for the first time *aqueous* therapeutic vitamin formula with minerals in a *single capsule* to hasten recovery in medical, surgical and convalescent patients. Professional samples and literature on VI-AQUAMIN THERAPEUTIC and other of our nutritional specialties will be distributed at the booth.

Varick Pharmacal Company **Booth No. 42**
New York, New York

E. Fougera & Company, Inc., and Division, Varick Pharmacal Company, cordially invite physicians to discuss with Professional Service Representatives new preparations of importance to their every-day practice. Descriptive literature and samples of all products will be available.

Warner-Chilcott Laboratories **Booth No. 81**
New York, New York

Two important cardiovascular agents will be featured at the Warner-Chilcott booth: Methium—to lower

blood pressure and relieve hypertensive symptoms and Peritrate—to prevent attacks in angina pectoris.
A *new* drug, Parsidol—for the efficient management of Parkinson's disease will also be exhibited. Representatives and research personnel will welcome an opportunity to discuss these drugs with you.

Westwood Pharmaceuticals **Booth No. 61**
Buffalo, New York

Westwood will display Gentia-Jel—the only effective gentian violet jelly you can prescribe for self treatment by the patient at home. Eliminates messy office treatments which often stain your furniture and clothing.
Lowila Cake, the only completely soapless skin cleanser, in bar form, available to your allergic or dermatitic patients whenever soap is contraindicated. Obtain a Lowila Cake from the Westwood Booth for your own personal use.

White Laboratories **Booth No. 32**
Kenilworth, New Jersey

DRAMCILLIN-300 SUSPENSION, a coconut-custard flavored penicillin preparation, provides 300,000 units of Potassium Penicillin G per teaspoonful and maintains its stability without refrigeration for a period of two years. The higher and more prolonged blood levels obtained by Dramcillin-300 Suspension supply an effective, ready-to-use, teaspoon-dosage medication.

Winthrop-Stearns, Inc. **Booth No. 28**
New York, New York

Winthrop-Stearns, Inc., New York, extends a cordial invitation to visit booth No. 28, where representatives will be on hand to discuss the latest therapeautic contributions (or pharmaceutical preparations) made by this firm. Featured will be

MONODRAL

Monodral is a new, well-tolerated, synthetic anticholinergic for peptic ulcer (gastric and duodenal), hyperacidity, pylorospasm, spastic and irritable colon. Monodral has unusual gastric and antisecretory power, producing temporary anacidity in many patients.

Wyeth Incorporated **Booth No. 90**
Philadelphia, Pennsylvania

Wyeth will feature BICILLIN®, the relatively insoluble, long-acting penicillin compound in various forms and combinations for treatment and prophylaxis of infections caused by penicillin-sensitive organisms and for prevention of rheumatic fever.
Also featured will be WYDASE®, the purified "spreading factor" hyaluronidase with a wide range of clinical applications.

Zimmer Manufacturing Company **Booth No. 23**
Warsaw, Indiana

Mr. C. A. Fisher, your Zimmer distributor, cordially invites the members and guests of the Michigan State Medical Society to visit our display at BOOTH NO. 23.
In addition to our complete line of Fracture and Orthopedic Equipment (instrument and splints), new items featured this year will include the ZIMMER EXPLOSION PROOF LUCK BONE SAW (underwriters approved), TOWNLEY TYPE FEMORAL HEAD, EICHER and all other type femoral prosthetic heads, ONE PIECE-DROP FORGED—SMo STAINLESS STEEL-JEWETT PLATE & NAIL COMBINATION, WOODRUFF HEAD BONE SCREWS, ZIMMER MODIFICATION CHARNLEY BONE CLAMP, and PELVIC TRACTION BELT.

Annual Reports

ANNUAL REPORT OF LEGISLATIVE COMMITTEE 1953-1954

The 1954 Legislature could have been disastrous; but it wasn't. Only the veto of one bill by the Governor marred the highly successful record of MSMS in protecting the welfare of the people of Michigan by working to maintain or improve legislation concerned with health and medical care.

Altogether, almost 800 bills and resolutions were introduced, of which some 76 had aspects of prime importance in the fields of medicine and health. MSMS thoroughly studied, obtained authoritative opinion on, and followed the progress of all these measures carefully.

For example, if MSMS had not been among those available to advise legislators on the impracticality or dangers of certain measures the 1954 Michigan Legislature might have—*BUT DID NOT:*

. . . Allow chiropractors to practice in fields far beyond their qualifications. (HB 290)
. . . Establish chiropractic legally as a profession. (HB 290)
. . . Establish osteopaths as medical practitioners by a "back door" amendment legalizing the phrase "osteopathic medicine." (SB 1166)
. . . Take away the protection given the people of Michigan by the Basic Science Law. (HB 287)
. . . Set up a permanent system of hospital licensing through a commission which could have been dominated by persons not in medical practice. (HB 184)
. . . Force the reporting of all positive tests of communicable diseases and particularly V.D. by laboratories, thereby setting up a governmental information network that could obtain evidence on any physician not reporting every suspected case of V.D. (HB 229)
. . . For all practical purposes kill the Afflicted Children's Act. (SB 1062)
. . . Permit out-patient departments of hospitals to usurp the physician's role in the care of welfare patients. (HB 429)
. . . Place all state health agencies under a single layman-controlled super-bureau with "unusual" powers. (HB 23)
. . . Give Labor an opening wedge into control of health and medical activities by establishing a new council in the Labor Department with veto power over all governmental health organizations providing care for the handicapped. (HB 90)

None of these proposals came true because *all of the bills listed above failed to pass.*

But looking at the positive side, the 1954 Legislature *did pass* the following bills, which:

. . . Strengthened the control of tuberculosis by putting teeth in the procedure for isolating and hospitalizing suspected tuberculosis cases and recalcitrant patients. (HB 242)
. . . Assured that Michigan residents will be eligible for Federal welfare benefits by amending the law to permit regulation of hospitals for the purpose, and to the extent necessary, to conform to Federal requirements. (SB 1224)
. . . Increased the state fee schedule for hospitals for the care of crippled and afflicted children. (SB 1089-SB 1090)

. . . Increased the state's share for indigent and free patient care in state sanatoria and county hospitals, to keep it in line with today's costs. (HB 99-HB 101-HB 102)

. . . Provided an opportunity to qualified M.D.'s from foreign countries by extending the privilege of temporary licensure to certain aliens other than displaced persons, providing they were residents of Michigan prior to January 1, 1952. (HB 205)

. . . Limited the fortifications of milk so that in the heat of competition, milk dealers could not over-medicate milk as a sales promotion measure. (HB 225—Vetoed by Governor)

. . . Taken an enlightened viewpoint on drug addiction and made it possible to work toward rehabilitation of known addicts without branding them as criminals. (HB 1255)

. . . Improved chance for smoother operation of the Basic Science Law by clarifying language that permits doctors qualifying in other "Basic Science" states to come to Michigan without re-examination in the basic sciences. (SB 1082)

. . . Provided more adequate appropriations for mental health, public health, TB, etc.

Thanks, Doctor—Let's Keep Interest Alive

A disappointment of the session was the Governor's veto of HB 225, which would have limited the fortification of milk so that in the heat of competition milk dealers could not over-medicate milk as a sales promotion measure.

There is talk in Lansing that new restrictions should be placed on the short even-year sessions of the Legislature, because these sessions produce few important bills other than those dealing with appropriations and state financial matters. This argument may have some merit, but from the viewpoint of the medical profession, and the welfare of the people of Michigan in general, many of the measures introduced and acted upon this year were far from inconsequential.

In all modesty, the Michigan State Medical Society, through the hard work and alert action of its members, can claim credit for serving the 1954 Legislature well. In acting to pass or reject a wide variety of bills, legislators looked to MSMS for guidance. In some instances this was offered in co-operation with other medical and health groups, but in many instances MSMS stood alone.

Doctor interest and activity in governmental matters between legislative sessions is necessary if this success is to continue.

Any way you look at it, the 1954 Legislature was a busy period for the MSMS members who accepted the responsibility of speaking for the medical profession in legislative matters.

The Legislative Committee offers sincere thanks:

. . . To all MSMS members who helped in many ways during the three-month legislative session,

. . . To those of you who worked closely with your own legislators at home, and

. . . To the others who gave of their time to come to Lansing and meet with legislators or take part in committee hearings and conferences.

Respectfully submitted,
L. A. Drolett, M.D., *Chairman*
G. V. Conover, M.D.
O. B. McGillicuddy, M.D.
R. H. Baker, M.D.
William Bromme, M.D.
W. L. Brosius, M.D.
J. C. Elliott, M.D.
O. K. Engelke, M.D.
M. A. Manning, M.D.
P. T. Mulligan, M.D.
J. R. Pedden, M.D.
J. S. Rozan, M.D.
LeMoyne Snyder, M.D.
R. V. Walker, M.D.

ANNUAL REPORT OF THE GERIATRICS COMMITTEE 1953-1954

The Geriatrics Committee held three meetings during the past year, one in Detroit, Lansing and Ann Arbor, respectively. There was a good attendance each time with an increasing amount of interest from different sections of the state. There are now seven county geriatric committees with more to be found in the near future.

Representatives from our Committee participated in the Institute, "Aging is Everybody's Business," held in Ann Arbor during June, 1954, under the direction of Dr. Wilma Donahue of the Department of Gerontology at the University of Michigan. These yearly meetings have been of great value in exploring the needs of the older person and of stimulating interest in the minds of a large number of people in all walks of life.

During the past year a number of approved nursing home operators throughout the state have been contacted and an attempt made to establish a closer association between the homes and the physicians in the respective communities. It is hoped that in this way the facilities in these homes will be improved with more consideration given to rehabilitation than in the past, for 50 per cent of the older age group are disabled physically or mentally.

An effort is also being made to develop interest in the aging problem on a local level through the formation of community committees on aging. These should be initiated by the physician and include a clergyman, banker, teacher and industrialist with members of the retired group of older persons in its membership.

The May issue of the MSMS Journal was devoted mainly to preventive geriatrics and was presented in the form of a panel discussion, with a large number of contributors from all parts of the country. Credit for this issue is given to F. C. Swartz, M.D., of Lansing, for 90 per cent of the work.

An institute on "Problems of the Aging Population," for physicians throughout the state is being planned to be held at Ann Arbor sometime in November.

Respectfully submitted,
A. H. Price, M.D., *Chairman*
P. C. Gittins, M.D., *Vice Chairman*
R. M. Athay, M.D.
F. W. Baske, M.D.
H. B. Bennett, M.D.
J. R. Brink, M.D.
E. F. Crippen, M.D.
F. E. Dodds, M.D.
R. E. Dustin, M.D.
G. S. Fisher, M.D.
J. J. Lightbody, M.D.
E. S. Rhind, M.D.
J. M. Ryan, M.D.
L. F. Segar, M.D.
C. W. Sellers, M.D.
F. C. Swartz, M.D.
G. C. Thosteson, M.D.
S. C. Wiersma, M.D.
H. W. Woughter, M.D.
W. M. LeFevre, M.D., *Advisor*

ANNUAL REPORT OF ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY—1953-54

On March 21, 1954, the Medical Advisory Committee met in Lansing with the Executive Committee of the Michigan State Medical Assistants Society. Various subjects of mutual interest to the doctors and their medical assistants were discussed. It was extremely interesting to note the keen interest shown by the medical assistants group in our problems as they are related to our patients and the practice of good medicine in the State of Michigan.

The subject of constitutional revision in regard to

eligibility of membership was discussed at some length, and a tentative revision was suggested to The Council of the Michigan State Medical Society. These suggestions are still under consideration for a future meeting.

A proposal that a Course for Medical Assistants be placed in the curriculum of some of our secondary schools in the State was thoroughly discussed, and further effort is being made to bring this idea to completion.

A National Survey on Medical Assistants Societies in other states has been completed, and an article was recently published on this survey in *The Journal of the American Medical Association*. As a result many inquiries have come to the Medical Assistants Group from other states signifying interest in forming a similar organization, and have requested information on organization.

The President, Mrs. Elizabeth Peck, has just completed a tour of all chapters in the state, meeting with them at one of their Spring meetings.

The Medical Assistants Society is continually making an effort to grow and establish groups in the various counties so that they may be of more service to the doctors and their patients everywhere.

Respectfully submitted,

Otto Van der Velde, M.D., *Chairman*
H. M. Bishop, M.D.
R. W. Emerick, M.D.
H. H. Heuser, M.D.
R. W. Pomeroy, M.D.
L. A. Pratt, M.D.
E. C. Swanson, M.D.
Ralph W. Shook, M.D., *Advisor*

ANNUAL REPORT OF THE COMMITTEE ON RHEUMATIC FEVER CONTROL 1953-1954

1. The Rheumatic Fever Control Committee has met five times since the last Annual Report: July 17, 1953; September 9, 1953; November 4, 1953; January 20, 1954 and May 12, 1954.

2. The Committee has received and studied the monthly statistical and financial reports of the several Rheumatic Fever Diagnostic and Consultation Centers, and the reports of Leon DeVel, M.D., Medical Co-ordinator of the Rheumatic Fever Control Program.

3. Twenty-five Rheumatic Fever Diagnostic and Consultation Centers, each sponsored and operated by the local County Medical Society, remain the feature activity of the MSMS Rheumatic Fever Control Program. The Centers are designed to provide diagnostic and consultation services to the practicing physician in the diagnosis and management of his more difficult cases. Admissions for examination are strictly limited to referrals by the family physician, and reports and recommendations are submitted to him. The Centers are not intended as treatment-clinics. The statistical report for the calendar year 1953 shows: 356 new admissions, ninety-nine of whom were recognized as rheumatic fever and/or rheumatic heart disease, 316 follow-up examinations, for a total of 672 examinations. As of January 1, 1954, the cumulative register of admissions (exclusive of Marquette) shows: 2,981 admissions, 934 of whom were recognized as rheumatic fever and/or rheumatic heart disease, 1,786 follow-up examinations, for a total of 4,767 examinations.

4. The Committee has prepared and distributed to the membership of the MSMS four additional "Desk Reference Cards for Rheumatic Fever" in a series designed to summarize certain phases of rheumatic fever and rheumatic heart disease for ready reference by the busy practicing physician: Card No. 10 "The Electrocardiogram;" Card No. 11 "A Four-point Program for Rheumatic Fever Control;" Card No. 12 "The Blood Pressure;" Card No. 13 "The Hemolytic Streptococcus." This series is to be continued.

5. Six Postgraduate Fellowships for the Study of Rheumatic Fever have been awarded for the year 1954. The committee has approved a choice of two comprehensive two-week courses in rheumatic fever and rheumatic heart disease; The one at St. Francis Sanatorium for Cardiac Children, Roslyn, L.I., the other at LaRabida Jackson Park Sanitarium, Chicago, Illinois. Recipients of the Fellowships are: Warren E. Shelden, M.D., Detroit; Harold Kessler, M..D, Alpena; Frank Van Schoick, M.D., of Jackson; J. Russell Brink, M.D., Grand Rapids; John R. Pedden, M.D., Grand Rapids; H. S. Heersma, M.D., Kalamazoo.

6. The Committee has studied and made recommendations to The Council, M.S.M.S., in the matter of participation by Health Departments in heart disease control. The plan is concerned with public education, follow-up of the physician's orders and recommendations, and with co-ordination of ancillary services. It has been recommended that in every instance participation of the Health Department shall be framed within the needs and capabilities of each community as determined jointly with the County Medical Society.

7. The Committee is engaged in a study concerning the education and vocational guidance of the rheumatic and/or cardiac child, in co-operation with the Special Education Division of the Michigan Department of Public Instruction. Recommendations will be made at a later date.

8. The Scientific Exhibit of the MSMS Rheumatic Fever Control Committee of the Annual Meeting of the M.S.M.S., Grand Rapids, September, 1953, was the most popular and successful ever presented. The exhibit featured a demonstration of the educational cardioscope, in co-operation with the University of Michigan Medical School.

9. The Committee is most grateful to the Michigan Heart Association for its continued interest in the MSMS Rheumatic Fever Control Program and for its financial support thereof. (The Michigan Heart Association is a member agency of the United Health and Welfare Fund of Michigan.)

10. The Chairman of your Committee greatly appreciates the counsel and support given him in carrying on the work of the Committee, by its individual members, by the Executive Committee of The Council, MSMS, and by the staff of the MSMS.

Respectfully submitted,

S. T. Harris, M.D., *Chairman*
E. W. Adams, M.D.
P. S. Barker, M.D.
R. H. Criswell, M.D.
Carleton Dean, M.D.
Thomas Francis, Jr., M.D.
R. A. Gerisch, M.D.
M. S. Hecht, M.D.
F. D. Johnson, M.D.
B. I. Johnstone, M.D.
J. D. Littig, M.D.
E. C. Long, M.D.
L. F. McCoy, M.D.
R. J. McGillicuddy, M.D.
H. S. Mellen, M.D.
W. B. Prothro, M.D.
L. Paul Ralph, M.D.
Mr. Emmet Richards
H. H. Riecker, M.D.
D. S. Smith, M.D.
Frank Van Schoick, M.D.
Mr. James Gerity, Jr., *Advisor*
L. Fernald Foster, M.D., *Secretary*
Leon DeVel, M.D., *Medical Co-ordinator*

ANNUAL REPORT OF THE VENEREAL DISEASE CONTROL COMMITTEE 1953-1954

During the past year two meetings were held. The first on July 11-12, 1953, and the second on January 27, 1954. During the first meeting several subjects were discussed, but final action was deferred until the January 27 meeting. This was held in Detroit and the following subjects were considered.

Dr. J. A. Cowan had previously reported on a survey of other states regarding some agent other than 1 per cent silver nitrate which might be used to control gonorrheal ophthalmia neonatorum. Twenty-one of forty-five states had laws permitting the use of other prophpylactic agents. Thirty-three states felt the problem of gonorrheal ophthalmia neonatorum was sufficient to warrant continuing the prophylactic law. Four states stated the problem was minor and nine states did not feel it was a sufficient problem to warrant legal action. Only two states thought the law should be repealed.

Dr. J. K. Shafer, head of the Venereal Disease Division of the United States Public Health Service, attended the meeting and stated that in California 1 per cent penicillin ointment had been accepted as an adequate prophylactic against gonorrheal ophthalmia neonatorum. The Committee moved and passed that this Committee submit to The Council of the MSMS recommendations to the State Advisory Council of Health of the State of Michigan allowing substitution of 1 per cent penicillin ointment in place of 1 per cent silver nitrate as a prophylactic for the prevention of gonorrheal ophthalmia neonatorum.

The Treponema Pallidum Immobilization test was discussed at length by Dr. A. C. Curtis, Dr. J. A. Cowan and Dr. L. W. Shaffer, especially in reference to the pre-marital examination and special dispensation. This Committee strongly urges that the T.P.I. test should be made available to doctors with special problems of syphillis or biological false positive reaction through the Michigan State Department of Health Laboratory at the earliest possible convenience for assistance in interpreting and applying the provisions of the pre-marital examination and special dispensation for applicants for marriage in whom false positive serological reactions are suspected.

The committee discussed the insertion of the word "chancroid" in the rules and regulations covering the Pre-Marital Physical Examination Law (Page 58 Michigan Regulations for the Control of Communicable Diseases, dated 1952) as modified by recommendation of the Committee at its July meeting.

MOTION: That the present regulations be amended by inserting the underlined:

"If the patient is found to be infected with gonorrhea and/or chancroid, certification for marriage should not be issued until absence of gonorrhea infection and/or chancroid is demonstrated to the satisfaction of the physician."

MOTION: That the Regulation No. 8 be amended as follows:

"In those cases infected with gonorrhea, employment may be resumed after the attainment of clinical and bacteriologic cure as judged by complete absence of signs and symptoms, including negative laboratory findings."

The present pre-marital Examination Certificate was discussed.

MOTION: That this committee recommends to the Michigan State Health Department that the Pre-Marital Examination Certificate be modified to read, "In my opinion, the patient is free of syphilis, gonorrhea and chancroid" in the place of the present wording of "venereal disease."

"Evaluation of Five Years' Experience with Pre-Marital Serological Examination for Syphilis" was presented by Dr. Cowan. A summary of the epidemiology of gonorrhea in the Social Hygiene Clinic of the Detroit Health Department was reported by Dr. Loren W. Shaffer as follows:

"For the past two and one-half years concentrated effort on gonorrhea epidemiology has been stepped up in the Social Hygiene Clinic of the Detroit Department of Health by the special project of training young college graduates as Venereal Disease Interviewers and Investigators at the Social Hygiene Clinic. This paper will be concerned chiefly with the results of this activity as it relates to the male gonorrhea patient and his contacts.

"With the advent of the training project the new techniques in venereal disease interviewing were introduced. Prior to this project the average patient named .81 contacts, whereas in the calendar year 1953 there were 2.21 contacts named per patient interviewed. In 1950 there were .18 new cases of gonorrhea brought to treatment per patient interviewed, whereas in the calendar year 1953 there were .41 contacts with new GC brought to treatment per patient interviewed or twice as many new cases found and brought to treatment by this epidemiological activity.

"In 1949 the total number of gonorrhea reported by the Social Hygiene Clinic was 4,795 cases of which 1,511 were females or 31 per cent of the total number of patients were females. In 1953 there were 4,561 cases of gonorrhea reported, of these 1,824 (or 40 per cent of the total) were females; an increase of 20 per cent of the reported females.

"When looking at the reason why women with positive laboratory gonorrhea came into the Social Hygiene Clinic, we find that 12 per cent volunteered, 22 per cent were referred to the Clinic (the majority of these by police activity) and 66 per cent were brought to treatment because of epidemiological activity.

"It clearly shows the role that contact interviewing plays in the control of gonorrhea in the female, which in most instances would never have come to the early attention of diagnosis and treatment.

"When looking at the reason why males with positive laboratory evidence of gonorrhea come into the clinic, we see that only 7 per cent were brought in by epidemiological work. This again focuses the attention that must be placed on interviewing of the male infected patient and the need of speed of locating the named female partner.

"In the Social Hygiene Clinic all female contacts are treated on epidemiological grounds. We find from our totals of 2,139 female contacts treated, that 1,071 (51 per cent) were diagnosed by laboratory means as being positive for gonorrhea.

"Likewise we find that of our total number of positives in females who had a positive culture, only one third of the individuals also had a positive smear test.

"It is our conclusion that the treatment on epidemiological grounds are sound and good Public Health methods. It is also felt that epidemiological activities play a major factor in finding and controlling the gonorrhea reservoir."

The Venereal Disease Committee reports with great regret the death of one of its long-time members, on May 7, 1954, Dr. Roy H. Holmes of Muskegon.

Respectfully submitted,
A. C. Curtis, M.D., *Chairman*
J. A. Cowan, M.D.
Ruth Herrick, M.D.
D. K. Hibbs, M.D.
R. H. Holmes, M.D.*
H. L. Keim, M.D.
H. E. Lichtwardt, M.D.
E. S. Parmenter, M.D.
L. W. Shaffer, M.D.
Frank Stiles, M.D.

*Deceased.

ANNUAL REPORT OF CHILD WELFARE COMMITTEE 1953-1954

The Child Welfare Committee of the Michigan State Medical Society and its various sub-committees was again active in the field of health and welfare problems as they applied to the children of Michigan.

Meetings and field trips were held at the Michigan School for the Blind, Ypsilanti State Hospital, and the Michigan School for the Deaf, where members observed the aims and programs of those institutions in relation to hearing, sight and psychiatric prophylaxis and therapy.

The Sub-Committee on School Health Problems held several preliminary meetings working out acceptable recommendations for school health policies. This sub-committee is working towards the completion of a uniform program at the state level and will continue with further meetings.

The Sub-Committee on Hearing Defects continued active co-operation with the hearing program of the State Health Department.

The Sub-Committee on Ophthalmology made further recommendations with regard to sight testing and conservation program.

The Child Welfare Committee will continue active co-operation with recommendations to the Michigan State Medical Society with regards to the solution of pediatric problems.

Respectfully submitted,

G. E. Anthony, M.D., *Chairman*
W. N. Braley, M.D.
G. B. Corneliuson, M.D.
Carleton Dean, M.D.
Ruth E. Lalime, M.D.
Don Marshall, M.D.
R. J. Mason, M.D.
M. F. Osterlin, M.D.
L. P. Sonda, M.D.
J. N. P. Struthers, M.D.
H. A. Towsley, M.D.
Frank Van Schoick, M.D.

ANNUAL REPORT OF THE COMMITTEE ON MENTAL HYGIENE 1953-1954

During 1953-1954, the Committee on Mental Hygiene has met on five occasions. Three sub-committees were very active and individual members carried out several special assignments. The Committee's activities for the year can be divided into the following three categories.

1. Participation in conferences:
   a. Members of the Committee attended the organizational meeting of the Michigan Association for Epilepsy, the Conference on the Proposed Psychiatric Hospital for Children held in the Governor's office in Lansing, and the National Governors' Conference on Mental Health.
   b. Subsequently, the Committee as a whole recommended approval of the organization of the new Association for Epilepsy and endorsement of the building of the children's psychiatric unit.
2. Advisory capacity:
   a. Upon the request of the Executive Director of the Michigan State Board of Alcoholism, the Committee made recommendations designed to assist the Board in establishing standards for hospitals treating alcoholics and in devising procedures for committing alcoholic patients to the Board.
   b. In response to an inquiry by a Probate Judge, a resolution which set forth criteria for commitment of patients with senile mental disease was adopted by the Committee.
   c. The proposal by members of the Legislature to establish a Mental Screening Board was carefully considered by the Committee. Amendment of the Mental Health Law to provide for the routine use of a thirty-day detention period in all cases being considered for commitment and the setting up of a pilot study to determine the applicability of a Mental Screening Board were therefater recommended by the Committee.
3. Studies conducted:
   a. Throughout the year, the problem of psychotherapy by non-medical persons has been intensively studied by a sub-committee. In this connection, the Committee is attempting to formulate a definition of "psychotherapy" and "counseling" which will be both brief and generally acceptable. The possibility of legal action in certain cases of obvious practice of medicine by unauthorized persons has also been recommended.
   b. A list of psychiatric questions considered appropriate for inclusion on the State Board Examinations has been drawn up and submitted by the Committee.
   c. After a careful evaluation, the Committee has recommended the establishment of a Governor-appointed commission whose efforts would be directed toward developing a program for teaching mental hygiene in public schools.
   d. Currently, the Committee is engaged in attempts to clarify the role of psychologic medicine in relation to other medical and non-medical disciplines. This is a project of utmost importance to which the Committee can profitably devote a large percentage of its time in the year to come.

For their generous co-operation and unstinted efforts, the Chairman wishes to express his appreciation to the members of the Committee whose hope it is that the Committee's activities have been of assistance to the Michigan State Medical Society.

Respectfully submitted,
H. Waldo Bird, Jr., M.D., *Chairman*
C. W. Bradford, M.D.
W. E. Clark, M.D.
F. P. Currier, M.D.
J. M. Dorsey, M.D.
T. J. Heldt, M.D.
L. E. Himler, M.D.
M. H. Hoffman, M.D.
R. F. Kernkamp, M.D.
I. A. LaCore, M.D.
M. H. Marks, M.D.
P. A. Martin, M.D.
F. O. Meister, M.D.
W. A. Obenauf, M.D.
R. W. Waggoner, M.D.
E. M. Williamson, M.D.
H. B. Zemmer, M.D.
H. A. Luce, M.D., *Advisor*

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE 1953-1954

This Committee has continued to be occupied with the business of a State Maternal Mortality Study begun in 1950 and now in its fifth year. Michigan, we have learned, does not have the lowest maternal mortality rate. We find maternal mortality has not reached that low irreducible minimum sometimes spoken of in the past with smugness. We are impressed that in addition to hemorrhage, infection and toxemia, which causes lead the list, there are other frequent factors such as anesthesia, the administration of imcompatible blood and certain misfortunes resulting from poor obstetric judgment and management which follow closely. Also failure in certain instances to appreciate the increased

hazard of pregnancy in the presence of such diseases as heart disease, diabetes, and hypertension contribute greatly to the problem. We note that there are instances of physician-patient inter-relationships and Hospital Administrative responsibilities which could be improved.

The Committee's most recent concern has been with the mechanisms by which this information can be properly disseminated to stimulate interest and medical progress. We believe that an exposition of the facts of the study to doctors and administrators and patients will eliminate some of the failures of the past.

We plan, therefore, to participate in medical programs in each county medical society, in co-operation with the local Maternal Health Committee, and present the story of the present problems as thoroughly as possible. We plan to have an exhibit at the State meeting. When in proper form we propose publication of the study. The State Journal for October, 1955, will be devoted to the subject of Maternal Health. The State Department of Health will continue to enlist the co-operation of every maternity unit to meet certain minimum standards. Finally, there is conviction of the value of the survey to cause its continuance beyond the original five-year period.

Respectfully submitted,

P. E. Sutton, M.D., *Chairman*
C. D. Barrett, Jr., M.D.
W. G. Birch, M.D.
G. B. Corneliuson, M.D.
A. L. Foley, M.D.
Margaret S. Hersey, M.D.
Francis Jones, Jr., M.D.
G. A. Kamperman, M.D.
H. W. Longyear, M.D.
S. T. Lowe, M.D.
N. F. Miller, M.D.
H. A. Ott, M.D.
H. A. Pearse, M.D.
D. W. Thorup, M.D.
C. E. Toshach, M.D.
Kathryn D. Weburg, M.D.
H. R. Williams, M.D.

ANNUAL REPORT OF THE COMMITTEE ON TUBERCULOSIS CONTROL 1953-1954

The Committee met on January 14, 1954, and again on March 25, 1954. The principal items brought up for discussion before the Committee were as follows:

1. The Committee was impressed with the increasing number of available empty beds in approved tuberculosis sanatoria in Michigan. Dr. Isbister (tuberculosis control officer for Michigan) estimates there might be 1,000 available empty beds in Michigan Sanatoria by July 1, 1954. The Committee at the same time recognizes that there are a large number of individuals in Michigan who are roaming at large with undiagnosed, active tuberculosis. The Committee was further impressed to learn that as compared with upwards of $20,000,000.00 a year being spent for the care of tuberculosis in our state, only a pittance was being expended to support our case-finding programs. It was the opinion of the Committee, that whereas Michigan has sufficient available beds to care for any added load, a sufficient appropriation to support an adequate case-finding program would be sound economy by the fact that it would attack tuberculosis at its source, and in a large measure would tend to find the cases in their early stage and thus materially shorten the period of their hospitalization.

2. The discussion at our meetings dealt largely with measures to improve the case-finding activities. The role of the general practitioner was repeatedly stressed in this discussion. To stimulate the interests of the general practitioner in the tuberculosis case-finding program, the following items were agreed upon:

3. *Education:* The pamphlet "Is it TB?", prepared by the American Trudeau Society, and published by the National Tuberculosis Association, will be sent to the Michigan physicians through the generosity of the Michigan Tuberculosis Association.

4. *Speakers:* Mr. T. J. Werle, Executive Secretary of the Michigan Tuberculosis Association, was a guest at the March 25 meeting. He announced that the Michigan Tuberculosis Association would defray the expenses of speakers appearing before county medical groups where the subject dealt with tuberculosis.

MOTION: That in the next Secretary's Letter to the secretaries and presidents of the county medical societies, an item be included concerning this offer of the Michigan Tuberculosis Association to reimburse expenses for a speaker for county medical groups on the subject of tuberculosis or other thoracic problems, in order that county medical societies may be cognizant of this offer of the Michigan Tuberculosis Association, and perhaps include a speaker in one of their county medical society programs. Carried.

5. The Journal of the Michigan State Medical Society: Mr. W. J. Burns, Executive Director of the Michigan State Medical Society, announced that the November, 1954, issue of the Michigan State Medical Society will be designated as a tuberculosis number. Plans are also in the making to designate the November, 1955, issue of The Journal to the same purpose.

6. *Additions to the Tuberculosis Control Committee:*

MOTION: That this committee express its appreciation to President L. W. Hull, M.D., for his attendance at this meeting, and expressed to him and to future Michigan State Medical Society presidents, the suggestion that more practitioners (general practitioners, roentgenologists, and others) be appointed to the Tuberculosis Control Committee. Carried.

7. *Mass Tuberculin Survey:* Dr. J. W. Towey requested Mr. Werle to comment briefly on the proposed mass tuberculin survey in the Gaylord area and thirty counties in the upper portion of the Lower Peninsula of Michigan.

Mr. Werle advised that it is their desire to discover how much TB infection exists; that the study may run three to five years. The Michigan Tuberculosis Association is requesting the sponsorship of the Michigan State Medical Society in execution of the program under the supervision of the County Medical Society. The Committee was advised that the Michigan State Department of Health would assist in providing test materials for use in the mass tuberculin testing and for use in the individual physician's office.

MOTION: That the testing and reading of tests be under the direction of the local medical society; that children be tested in the first, sixth, ninth, and twelfth grades annually, and that the program be continued over a period of five years. Carried.

Further discussion concerning the follow-up of tuberculin reactors from the mass tuberculin test, the Committee felt an x-ray should be left to the discretion of the county medical society and who will do the x-ray, and where.

MOTION: That local option as to who will take the x-ray and interpret same, which should be performed by a person competent to interpret the films, be left to the discretion of the local medical society. Carried.

MOTION: That the Tuberculosis Control Committee of the Michigan State Medical Society recommends to The Council of the Michigan State Medical Society that the inclusion of one 14 x 17 (standard) film as an integral part of the miniature film x-ray survey for persons whose screening films indicate suspected pathology be approved. Carried.

MOTION: That the Tuberculosis Control Committee recommends to The Council the acceptance by the Michigan State Medical Society of sponsorship of the mass survey for tuberculosis to be conducted by the

Michigan Tuberculosis Association and the Michigan Department of Health. Carried.

8. *Differential in Rates:* The Committee discussed at some length the differential in rates between county and state tuberculosis institutions, and during the discussion brought to light the fact that the State of Michigan has less federal tuberculosis beds for veterans than many other states in proportion to population.

MOTION: That the Tuberculosis Control Committee recommends to The Council of the Michigan State Medical Society that the State Sanatorium Commission be requested to establish a rate in state sanatoria at actual per diem cost of the preceding fiscal year. The motion was carried with two "nay" votes recorded, one not voting.

9. *Legislation:* The members of the Committee discussed Senate Bill 1288, which pertains to the hospitalization of State-at-Large patients.

MOTION: That the Tuberculosis Control Committee of the Michigan State Medical Society goes on record as not approving Senate Bill 1288, beginning at the line 47 "and the controller—" through 56, and recommending to The Council of the Michigan State Medical Society that the Committee urges that portion of the bill be deleted. Carried.

(Subsequent to the meeting of this Committee the bill was defeated in the House).

A bill relative to the appropriation to support an adequate case-finding program in our state was discussed.

MOTION: The Committee recommends to The Council that the Legislative program as outlined to the Committee by Dr. Isbister of the Michigan Department of Health, be approved. Carried.

(This bill was finally passed by the legislature, but the amount requested, namely, $350,000.00 was reduced to $126,000.00.)

10. *Single Dose Tuberculin:* Dr. J. L. Isbister advised that the Michigan Department of Health has been studying the optimal dose with the optimal sensitivity and minimum reaction for tuberculin testing. He advised that the study indicated a solution of 1 to 3300 or 1 to 2500 should be recommended, and that this solution was being studied for production and distribution for use in surveys and in the general practitioner's office.

MOTION: That the Tuberculosis Control Committee recommends to The Council of the Michigan State Medical Society endorsement of the plan under consideration by the State Health Department to distribute old tuberculin in a solution of 1 to 3300. Carried.

MOTION: Among the uses for the Mantoux tuberculin test that this Committee recognizes and urges:

A. Its use as a diagnostic and case-finding procedure in the offices of private physicians.

B. As a survey procedure carried out under proper medical supervision for the determination of the prevalence of tuberculosis infection. Carried.

11. *State Subsidy for Hospitalization:* A general discussion ensued on the sanatorium bed situation with empty beds appearing for the first time in years.

MOTION: That this Committee reaffirm the motion of March 4, 1953, meeting, that the Legislature give due thought to adequate subsidy for hospitalization in approved tuberculosis institutions in Michigan for adequate care of the tuberculosis patient. Carried.

(Subsequent to the meeting of the Committee, the state subsidy was raised from $3.50 per indigent day to $4.00 per indigent day.)

12. *Recalcitrant Problem:* This perennial was discussed by Dr. Isbister who presented two bills which will be introduced in the Legislature in the very near future. After study of these bills:

MOTION: That these bills be approved in principle by this Committee and be respectfully referred to The Council. Carried.

13. *Hospital Treatment for Tuberculosis:* Recognizing that tuberculosis is an infectious disease and should be processed in an institution, and that the patient should be isolated for his own and the public's protection.

MOTION: Despite the success of chemotherapy alone, this Committee goes on record that the present knowledge of tuberculosis therapy indicates the treatment of choice to be sanatorium care. Carried.

14. In view of the empty bed situation throughout Michigan, the Committee felt that a thorough study should be made of the entire problem.

MOTION: That a study be conducted of the entire economic problem with regard to the care of tuberculosis patients. Carried.

15. It has been proposed that Dr. Towey, Chairman of this Committee, meet with The Council to better acquaint them with the numerous problems arising in the field of tuberculosis. The present arrangements are for Dr. Towey to appear before The Council at their meeting on June 9, 1954.

Respectfully submitted,
J. W. Towey, M.D., *Chairman*
P. T. Chapman, M.D.
F. M. Doyle, M.D.
J. L. Egle, M.D.
*N. J. Frenn, M.D.
W. B. Howes, M.D.
J. L. Isbister, M.D.
G. T. McKean, M.D.
D. S. Smith, M.D.
A. F. Stiller, M.D.
C. J. Stringer, M.D.

*Deceased.

ANNUAL REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY 1953-1954

No specific problems presented themselves for solution so this Committee held no meeting during the past year.

Letters from the Chairman were sent to doctors in Hillsdale County and in Chippewa-Mackinac County for the purpose of helping the State Woman's Auxiliary to organize auxiliaries in these counties; these letters preceded personal visits made by MSMS Woman's Auxiliary President Mrs. Walter S. Stinson of Bay City and Past President Mrs. O. D. Stryker, of St. Clair Shores.

The report on the favorable progress of the Woman's Auxiliary to MSMS will be presented to the House of Delegates by the President Mrs. W. S. Stinson on Monday, September 27.

Respectfully submitted,
W. W. Babcock, M.D., *Chairman*
A. B. Aldrich, M.D.
W. J. Butler, M.D.
D. F. Scott, M.D.
W. L. Sherman, M.D.
W. S. Stinson, M.D.

ANNUAL REPORT OF IODIZED SALT COMMITTEE 1953-1954

One meeting of the Committee was held on March 23, 1954, with all members present. Plans for the future year were decided upon and include: (1) a placard to be used in grocery stores advising the use of iodized salt, (2) a plan to educate wholesale grocers, (3) an exhibit at MSMS Annual Sessions, and (4) articles to be published in such magazines as *Parent Teacher Bulletin, Michigan Teacher Bulletin,* and the *Farm Bureau Magazine.*

During the year requests were received from almost every country for reprints regarding the Michigan Goiter Control Program. This international interest shows that endemic goiter is still very prevalent in many areas, and that there is a renewed interest in its prevention. Sur-

veys are being planned in Ohio, some South American countries and the Philippines. The results of our Michigan studies were reported at several medical meetings during the year, including the International Physiological Congress.

The State Health Department has continued its fine work in the promotion of the use of iodized salt. J. K. Altland, M..D, has had several pamphlets prepared for distribution by various agencies, so that our gospel will reach the home and the grocery buyers.

One meeting of the National Goiter Society was attended and our Michigan experience and progress was reported.

Respectfully submitted,

B. E. Brush, M.D., *Chairman*
H. A. Towsley, M.D., *Vice-Chairman*
J. B. Blodgett, M.D.
F. E. Dodds, M.D.
R. C. Moehlig, M.D.

ANNUAL REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION 1953-1954

During the year 1953-1954, your Committee on Postgraduate Medical Education met on January 7, and May 27, 1954, to review and discuss the teaching program as presented in the following centers: Alpena, Battle Creek, Bay City, Cadillac, Flint, Jackson, Lansing, Mt. Clemens, Muskegon, and Traverse City in the lower peninsula; and Escanaba, Houghton, Iron Mountain, Ironwood, Marquette, Menominee, and Sault Ste. Marie in the upper peninsula.

At the January meeting of the Committee, a change was suggested in the type of program to be presented in the various teaching centers. After general discussion, two motions were passed: (1) That panels consisting of four teachers be used for 1954 spring program, and that other changes in the fall 1954 program be based on suggestions for subject material obtained from the membership in the various teaching centers; (2) That the Chairman and Dr. John M. Sheldon devise means to contact members of the MSMS regarding their desires for subject material for the extramural programs.

The subjects presented during the year were:

Fall Program:

Diabetes, Its Relation to Other Clinical States.
Biliary Tract Disease.
Hyperthyroidism.
Gynecomastia in Hyperthyroidism in Treated Myxedema.
Nephritis.
Gynecologic Plastic Procedures.
Pulmonary Emphysema.
Thyroid Disease; its Newer Aspects.
Some Aspects of Pulmonary Insufficiency.
Treatment of Male Hypogonadism.
Prolonged Labor.
Ulcerative Colitis.
Poliomyelitis.

Spring Program:

Abdominal Pain.
Antibiotics.
Anticoagulant Therapy.
Appendicitis.
Cancer in the Female.
Clinical Application of Present-Day Knowledge of the Blood-Clotting Mechanism.
Dermatologic Manifestations of Internal Disease.
Diverticulitis of Colon.
Peripheral Vascular Disease.
The New Hypertensive Drugs.
The Non-traumatic Surgical Emergencies.
Uterine Surgical Disease.

Attendance—Extramural Program

Center	*Fall*	*Spring*	*Individual Physicians*
Alpena	21	18	23
Battle Creek	57	—	57
Bay City	26	38	50
Cadillac	—	42	42
Flint	54	61	93
Jackson	77	66	95
Lansing	47	59	83
Mt. Clemens	26	20	36
Muskegon	58	67	82
Traverse City	41	—	41
Upper Peninsula			
Escanaba	22	19	26
Houghton	19	20	23
Iron Mountain	17	20	24
Ironwood	20	18	24
Marquette	23	20	30
Menominee	29	26	32
Sault Ste. Marie	26	24	34
	563	518	795

The attendance increased from 754 in the previous year to 795 during 1953-1954.

In the fall of 1953 and spring of 1954, Dr. John M. Sheldon and your Chairman joined in panel discussions in all the teaching centers in the Upper Peninsula. The response to the extramural teaching program in this region was exceptional. Over 80 per cent of the practicing physicians attended the fall and spring meetings. The doctors were most enthusiastic and heartily favor the panel discussion type of program with audience participation. In several centers in the upper peninsula, the afternoon clinics were well attended and most interesting. Clinical cases were presented, showing that many of the doctors had spent considerable time in preparing case histories and assuring the attendance of their patients at these clinics. It was the feeling of the Chairman and Dr. Sheldon that the afternoon clinics should be continued in those centers where hospitals and clinical material as well as the interest of the doctors make it possible to hold these teaching exercises.

At the May meeting of the Committee the request of the St. Clair County Medical Society for the establishment of a teaching center in Port Huron was thoroughly discussed. It was felt that the doctors of St. Clair, Sanilac and Huron counties would support such a program, and that the Mt. Clemens teaching center might be joined with this new teaching center. Motion was made and carried recommending to the Executive Committee of The Council the establishment of a new center in Port Huron to serve these areas.

The following named physicians participated in the extramural postgraduate teaching program during the year:

William H. Beierwaltes, M.D., James B. Blodgett, M.D., Robert W. Buxton, M.D.

William S. Carpenter, M.D., Muir Clapper, M.D., Norman E. Clarke, M.D., Ralph R. Cooper, M.D., Howard H. Cummings, M.D.

Ivan F. Duff, M.D.

E. Richard Harrell, Jr., M.D., Paul Hodgkinson, M.D., Paul E. Hodgson, M.D.

Alfred M. Large, M.D.

William O. Maddock, M.D., G. Thomas McKean, M.D.

Harry Nelson, M.D.

Henry K. Ransom, M.D., Rigdom K. Ratliff, M.D., Harold B. Rice, M.D.

Henry K. Schoch, M.D., Walter H. Seegars, Ph.D., Laurence F. Segar, M.D., John M. Sheldon, M.D.

Myer Teitelbaum, M.D., E. Thurston Thieme, M.D.

James L. Wilson, M.D.

Upon the recommendation of the Committee on Postgraduate Medical Education, the Michigan Foundation for Medical and Health Education granted certificates of Associate Fellowship in Postgraduate Medical Education to seventy-eight physicians and certificates of Fellowship to forty-seven physicians.

Attendance on medical conferences throughout the

state could not be obtained in all instances, but the registration at the following meetings throughout the state has been received:

Coller-Penberthy Conference. July 30-31, 1953. Traverse City	133
Mich. State Medical Society. September 23-25, 1953. Grand Rapids	1704
Michigan Clinical Institute. March 10-12, 1954. Detroit	1735
American Medical Assn. Clinical Session. Dec. 1-3, 1953. St. Louis	47
Wayne Univ. College of Medicine Clinic Day and Alumni Reunion. May 12, 1954. Detroit	339
Genesee County Medical Society Cancer Day. April 14, 1954. Flint	207
	4165

Intramural Activities

The following postgraduate courses were given in the *University of Michigan Medical School:*

Courses	*Registrants*
Anatomy	33
Clinical Exercises for Practitioners	20
Clinical Internal Medicine	54
Basic Sciences	28
Diagnostic Radiology	31
Diseases of Blood and Blood-Forming Organs	17
Diseases of the Gastro-Intestinal Tract	16
Diseases of the Heart	20
Electrocardiographic Diagnosis	38
Foreign Physicians	13
Interns, Residents and Assistant Residents	287
Metabolism and Endrocrinology	29
Miscellaneous	28
Neurology	11
Obstetrics and Gynecology	28
Ophthalmology	97
Otolaryngology	21
Pediatrics	19
Recent Advances in Therapeutics	35
Rheumatic Disease	16
Total	841

The following postgraduate courses were given at *Wayne University College of Medicine* from September, 1953 to June, 1954.

Courses	*Registrants*
Physiological Chemistry Seminar	1
Survey of Medical Chemistry	3
Seminar in Dermatology	2
Seminar in Dermopathology	4
Medical Conference	5
Electrocardiography (9 months)	33
Gastroenterology	1
Medical Seminar	4
Medical X-Ray Conference	2
Medical Pathologic Conference	3
Surgery Seminar	19
Basic Ophthalmology (9 months)	2
Cancer Detection	7
Blood (6 months)	2
Endocrinology	17
Beginning Hematology	3
Hematology Clinic	2
Review of Clinical Hematology	2
Special Dissection	2
Surgical Anatomy	12
Regional Anatomy	
Head and Neck	5
Thorax, Abdomen and Pelvis	18
Back and Extremities	2
Nutrition	1
Physiology & Pharmacology Seminar	3
Advanced Hematology	1
Total	156

For several years your Committee has had difficulty in obtaining obstetricians to teach throughout the State. The following letter was received from Dr. Harold A. Ott, offering the services of two teams of well-qualified obstetricians to present obstetrical subjects:

"About two weeks ago I spoke to you regarding the desire of the Michigan State Medical Society's Maternal Health Committee to have obstetrical topics included in the postgraduate courses held at various centers of the Upper Peninsula and the so-called upper Lower Peninsula. As you may recall, this resulted from the desire of the Committee to make effective use of the data and conclusions which have come from its study of maternal deaths.

The Committee hopes that neither the subjects nor policies of the postgraduate courses be altered by this request. Because more information regarding the problems and interests of the out-state physicians would be distinctly valuable to the Committee, such could result if some of its members were included on the participating faculty. It believes that these members could make an educational contribution by informal discussion at afternoon clinical sessions.

This desire of the Committee has been approved by The Council of the State Society which authorized my conversation with you. I reported to the Committee at its meeting on May 4, 1954. Dr. Palmer Sutton, chairman, wishes to nominate the following members for your faculty and to suggest that they are, because of the study they are making of maternal deaths, particularly interested in and extremely familiar with the topics listed.

Dr. Palmer Sutton, Royal Oak
Toxemia of Pregnancy
Dr. Harold Longyear, Royal Oak
Obstetrical Hemorrhage
Dr. Howard Williams, Ann Arbor
Infection in Obstetrics
Dr. Francis Jones, Jr., Lansing
Operative Obstetrics

Since you suggested that obstetricians have been difficult to obtain for these courses and that panels are effective means of presenting material, I have, as President of the Michigan Society of Obstetricians and Gynecologists, obtained consent of the following members to take a part in these courses. I suggest that they be teamed up with those above according to topic.

Dr. Herbert Gaston, Detroit
Toxemia of Pregnancy
Dr. Leonard Heath, Detroit
Obstetrical Hemorrhage
Dr. Harold Lampman, Detroit
Infection in Obstetrics
Dr. William Coulter, Detroit
Operative Obstetrics

All of these men are seasoned clinicians and qualified specialists. They have been very active in the study of obstetrical problems. They are considered effective teachers. They can prepare any topic in obstetrics or gynecology which your committee might like to assign.

Dr. Sutton has authorized me to present these nominations and suggestions to you. He will confirm the nominations of the Maternal Health Committee through the regular state society channels.

I hope that these suggestions will meet with the approval of the Committee on Postgraduate Medical Education. Detailed assignment regarding the centers and the time can be made by Dr. Sutton and myself as your committee desires."

HAROLD A. OTT, M.D.

Dated: May 8, 1954

On motion the Committee recommended to the Executive Committee that the services of these obstetricians be accepted and that these men be formed into two teams for the teaching assignments in obstetrics as requests are received.

The Committee on Postgraduate Medical Education of the MSMS suffered a great loss in the passing of Dr. Edward D. Spalding who has made great contributions to the work of this Committee. A fitting testimonial was passed by the Committee at its January meeting. President L. W. Hull, M.D., notified the Committee that he had appointed Dr. R. A. Johnson, of Detroit, to fill the unexpired term of Dr. Spalding. The Committee welcomes Dr. Johnson and feels that he can make a valuable contribution to the work in postgraduate medical education.

All of the activities and recommendations of the Committee were submitted to The Council of the MSMS for its approval and action. The members of the Committee are most grateful to The Council for its wholehearted support, as well as to the physicians of the state who year after year attend the programs in the various teaching centers.

The year 1953-54 has been a very successful one, showing renewed activities and interest in medical education. Our larger centers are carrying on vigorously and offering well-planned medical programs. In the smaller centers the extramural activities of the MSMS continue to serve a very valuable purpose.

Respectfully submitted,
H. H. Cummings, M.D., *Chairman*
E. I. Carr, M.D.
C. E. Badgley, M.D.
D. A. Cameron, M.D.
B. R. Corbus, M.D.
A. C. Furstenberg, M.D.
J. R. Heidenreich, M.D.
L. J. Hirschman, M.D.
R. A. Johnson, M.D.
D. H. Kaump, M.D.
D. W. McLean, M.D.
J. M. Robb, M.D.
G. H. Scott, Ph.D.
J. M. Sheldon, M.D.
E. F. Sladek, M.D.
E. D. Spalding, M.D.*
F. A. Weiser, M.D.

*Deceased.

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE 1953-1954

This report highlights the more significant activities of the several Advisory Committees whose full reports appear in this handbook.

The Maternal Health Committee is continuing the five-year study started in 1951 and has compiled data which are now being transmitted to the profession. The most frequent causes of deaths have been charted and their preventability emphasized. Two papers on the subject have already been presented by Committee members during the year.

In conjunction with the State Health Department, rules and regulations have been set up for the licensing of maternity hospitals.

The Cancer Control Committee has been concerned with the organization of the Michigan Cancer Coordinating Committee and in plans for participation in the sixth Annual Michigan Cancer Conference as well as the Michigan Rural Health Conference. The Committee sponsored a luncheon for Dr. Eugene P. Pendergrass, Sykes Lecturer, at the Michigan Clinical Institute, March 10, 1954, and promoted the cancer number of The Journal MSMS for April, 1954.

The Rheumatic Fever Control Committee now has twenty-five centers in operation with referrals and examinations showing a substantial increase, particularly in Alpena, Ann Arbor, Grand Rapids, Kalamazoo, Muskegon, Pontiac, Royal Oak and Traverse City. Numerous organizations were reached by lectures and conferences, additional "desk reference" cards were compiled and distributed, and a preliminary study of Selective Service System rejections for cardiovascular disease was started.

The Venereal Disease Control Committee has compiled a report of mass blood tetsing in Detroit, sponsored a special number of The Journal MSMS (August, 1953), and surveyed existing State laws on prophyalxis for gonococcal ophthalmic neonatorum. A change in the law on the reporting of gonorrhea was considered, as was a recommendation to publicize an informative review of the State premarital law as well as the rules pertaining to pre-natal blood testing.

The Industrial Health Committee is fostering better understanding between the medical profession and plant personnel officers and has been developing a form to be filled out by practicing physicians for workers requesting a change in jobs for health reasons. It is also stimulating preventive medicine programs for small plants that have no regular physician. Criteria for selective retirement of employes are under consideration by the Committee.

The Committee on Mental Hygiene has been taking an active part in the discussion and formulation of plans for the construction of a children's psychiatric hospital and for the appointment of a mental hospital screening board at the state level. It also participated in the organization meetings of the Michigan Epilepsy Association.

The Child Welfare Committee has two important sub-committees, one on school health problems and the other on visual and hearing defects, working on a variety of problems. The first is making initial studies on numerous unco-ordinated school health problems, while the second has already contributed recommendations on adoptions, polio prophylaxis, intern and resident pediatric training, epilepsy, emotional disturbances, accident prevention and retrolental fibroplasia. This Committee, too, is sponsoring a special issue of The Journal MSMS (September, 1954).

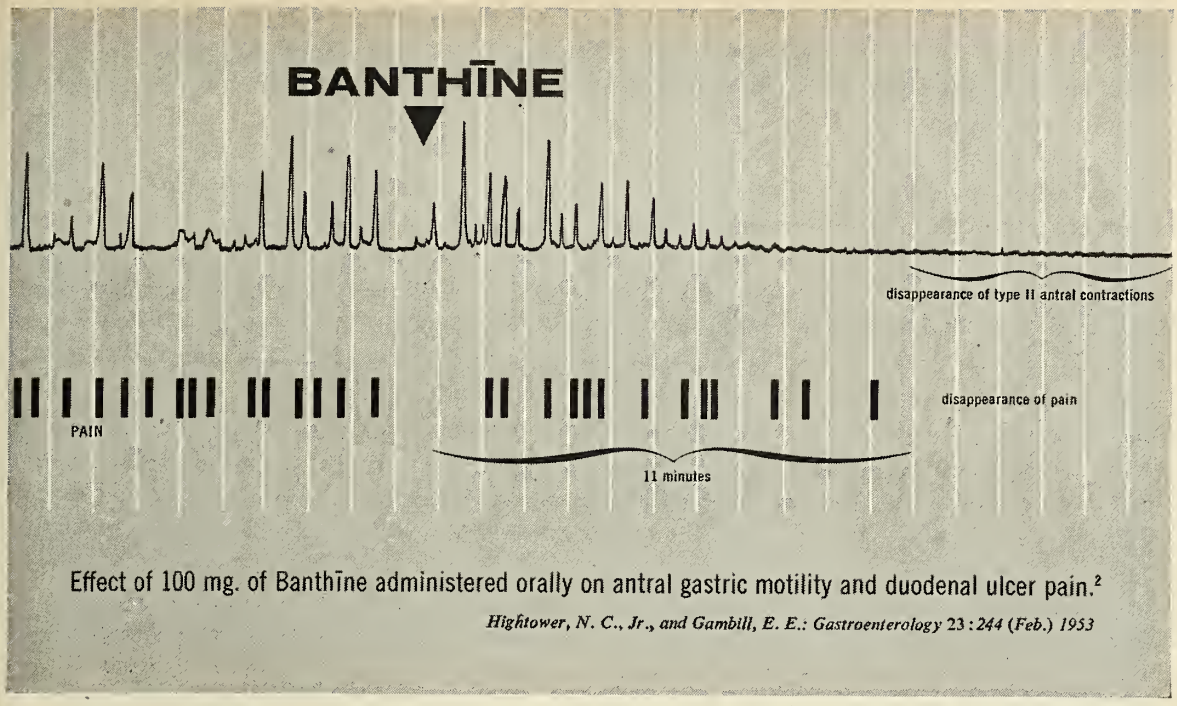
The Committee on Geriatrics has been concerned with the problems of selective employe retirement, the quality of nursing homes, and the formation of County Society Geriatric Committees. Its members participated in the July, 1954, conference on geriatrics at Ann Arbor, and sponsored a special issue of The Journal MSMS for May, 1954.

The Iodized Salt Committee has been furthering interest in its work through the publication and widespread distribution of the report on the Michigan Goiter Control Program and the presentation of the subject by the Chairman at various important national and international meetings.

Statistics on goiter surgery performed in eight Michigan hospitals are being kept up to date and expanded.

The State Health Department, through its representatives Drs. A. E. Heustis and J. K. Altland, participated in all of the deliberations, offering valuable suggestions and guidance. Informative progress reports on its activities were presented regularly to the Committee.

Respectfully submitted,
W. S. Reveno, M.D., *Chairman*
G. E. Anthony, M.D.
H. W. Bird, Jr., M.D.
B. E. Brush, M.D.
A. C. Curtis, M.D.
H. H. Cummings, M.D.
S. T. Harris, M.D.
A. E. Heustis, M.D.
W. A. Hyland, M.D.
O. J. Johnson, M.D.
A. H. Price, M.D.
J. M. Sheldon, M.D.
P. E. Sutton, M.D.
J. W. Towey, M.D.



Effect of 100 mg. of Banthine administered orally on antral gastric motility and duodenal ulcer pain.[2]

Hightower, N. C., Jr., and Gambill, E. E.: Gastroenterology 23:244 (Feb.) 1953

Banthine® Reduces Hypermotility and Hyperacidity in Peptic Ulcer

A recent evaluation of anticholinergic therapy in peptic ulcer emphasizes the fact that now the profession has at its disposal agents that are "effective in reducing both secretory and motor activity of the stomach."

The effect on motor activity is generally more pronounced and less variable than on secretion; pain relief is usually prompt; a high degree of effectiveness is noted in ambulatory ulcer patients.

Ruffin, J. M.; Texter, E. C., Jr.; Carter, D. D., and Baylin, G. J.: J.A.M.A. 153:1159 (Nov. 28) 1953.

With its proved anticholinergic effectiveness, Banthine has been found extremely useful in the medical management of active peptic ulcer, whether duodenal, gastric or marginal.

The immediate increase in subjective well-being and the simplicity of the Banthine regimen assures patient cooperation. The recommended initial therapeutic dose is 50 or 100 mg. (one or two tablets) every six hours around the clock, with subsequent individual adjustment. The usual measures of diet regulation, rest and relaxation should be followed.

Banthine is effective in other conditions caused by excess parasympathetic stimulation. These include hypertrophic gastritis, acute and chronic pancreatitis, biliary dyskinesia and hyperhidrosis. Banthine is contraindicated in the presence of glaucoma and should be used with caution in the presence of severe cardiac disease or prostatic hypertrophy.

Banthine® bromide (brand of methantheline bromide) is supplied in scored tablets of 50 mg. and in ampuls of 50 mg. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

IMMUNE SERUM GLOBULIN TO BE DISTRIBUTED

Again, this summer, poliomyelitis immune globulin will be distributed by the department for use in the prevention or modification of paralytic polio. It is expected that enough will be available for the state's needs, furnished by the National Foundation for Infantile Paralysis through the Office of Defense Mobilization.

This year the globulin will not be available for single family units since there is no evidence that the use of the product in such units last year either prevented secondary cases or modified their severity if they did occur.

The product will be available for group inoculations provided that the group is larger than a single family unit, such as a neighborhood, an apartment house, a camp, an area or district within a community. The character and size of the group shall be determined by the local full-time health officer.

If the community-wide inoculations are contemplated, prior approval must be obtained from the Michigan Department of Health.

The dose of poliomyelitis immune globulin is 0.2 cc. per pound body weight instead of the 0.14 cc. per pound body weight of last year.

For the prevention or modification of measles immune serum globulin is available for all age groups.

The dose for modification is .02 cc. per pound body weight five to six days after exposure and the dose for prevention is .1 cc. per pound body weight as soon after exposure as possible.

For household or equivalent contacts of cases of infectious hepatitis immune serum globulin is available.

The dose is 0.2 cc. per pound body weight and all age groups are eligible.

Federal law prohibits dispensing either poliomyelitis immune globulin or immune serum globulin without a physician's signature.

POLIO VACCINE FIELD TRIALS INCLUDE 54,600 CHILDREN

A total of 54,600 boys and girls were given the first injection of Salk vaccine in the field trials conducted in 10 Michigan counties. These were tabulated by counties as follows: Bay—2,255; Calhoun—3,579; Kent—11,597; Lenawee—2,138; Macomb—7,288; Monroe—2,067; Muskegon—4,408; Oakland—17,116; Ottawa—1,904; St. Clair—2,248.

Only 702 children failed to appear for the second injection and it was expected that these would be picked up at the third and final clinics which are in progress as this is being written.

REPORT ON MATERNITY HOSPITAL LICENSING

As of May 1, 1954, there were 261 known maternity hospitals in the state containing a total of 3,870 maternity beds. Progress in carrying out the objectives of the program is indicated by the following:

On December 31, 1952, there were 114 hospitals with provisional licenses.

On December 31, 1953, there were eighty hospitals with provisional licenses.

On May 1, 1954, there were fifty-eight hospitals with provisional licenses.

Since September 1951, twenty-eight hospitals have closed voluntarily; twenty-one of these had three or less beds.

Since the start of the program, one application for a license has been denied and an opportunity for hearing offered.

EXTENT OF HYPERSENSITIVITY TO PENICILLIN STUDIED

The division of tuberculosis and adult health is receiving an increasing number of reports of syphilis and gonorrhea patients who show a hypersensitivity to penicillin therapy. The division is interested in any information that physicians can provide regarding the extent of this problem and whether or not there is a need for the Michigan Department of Health to supply antibiotics other than penicillin for this type of case.

BULK MILK DISPENSING

Act 171, P.A. 1954 permitting the sale of milk from refrigerated dispensing machines goes into effect August 13. Such machines must have the approval of the Michigan Department of Agriculture.

GLASSES PURCHASING PROGRAM CONTINUES

The glasses purchasing project for children carried on for twenty-five years by the Children's Fund of Michigan has been replaced by a similar, privately financed program. Funds have been made available to the Michigan Crippled Children Commission that will enable any county to participate. Local health departments were asked to submit their applications by the first of June.

Every time a physician neglects an opportunity to make a requested medical examination for cancer, he widens the rift in the physician-patient relationship and lessens the patient's belief and trust in his scientific ability and that of the entire medical profession.



BRIGHTON HOSPITAL

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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

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In Memoriam

FRANK S. CROSS, M.D., of Lansing, died suddenly March 30, 1954. He was fifty-four years old.

Dr. Cross had been in private practice since 1943.

In 1941-42, he was director of the Lansing Health Department, and prior to that served as Lansing's school physician for three years.

A native of Delaware, Ohio, Dr. Cross was graduated from Ohio Wesleyan University and received his medical degree from Ohio State University. After graduation from medical school, he spent two years at Willard Parker Hospital in New York City and one year at Butterworth Hospital in Grand Rapids before coming to Lansing.

Dr. Cross was a Fellow of the American Academy of Pediatrics. He was a member of First Presbyterian Church and was active in Masonic affairs.

Dr. Cross is survived by his widow, Mary Keith; a brother, Lt. Col. Wm. P. Cross, who is stationed at Seoul, Korea; and a sister, Lois Cross, M.D., of Shepherdstown, West Virginia.

JAMES HOUSTON, M.D., of Swartz Creek died October 31, 1953, at the age of eighty-four. Dr. Houston had been a life member of MSMS since 1946.

Born in England, Dr. Houston came to the United States when he was nine years old. He was graduated from the Detroit College of Medicine in 1897, and had practiced in Swartz Creek since that time, with the exception of ten years spent in Flint immediately following World War I. He served in the Army Medical Corps for a year during the first World War, being discharged with the rank of major.

Dr. Houston is survived by a daughter, Mrs. Max Rumbold of Flint.

PAUL A. KLEBBA, M.D., chief medical examiner for Wayne County and Director of the Wayne County Pathological Laboratory, died in Detroit, March 24, 1954, at the age of sixty-three. Dr. Klebba became ill while vacationing in Florida and was flown to Detroit for surgery.

A native Detroiter, Dr. Klebba was a graduate of the Detroit College of Medicine and Surgery, now Wayne University College of Medicine, receiving his M.D. degree in 1914. He served overseas as a medical officer in World War I, reaching the rank of captain.

Dr. Klebba had been with the Wayne County Medical Service since 1922 and was named Director of the County Pathological Laboratory in 1934. He became Chief Medical Examiner in October, 1951. He was recognized as an authority on carbon monoxide and industrial disease, and through his knowledge of toxicology served as expert witness in many sensational criminal trials during the past 20 years.

Before giving up his private practice five years ago, Dr. Klebba served as medical consultant to several well-known Detroit industrial concerns. He wrote some 60 papers on various phases of Workmen's Compensation disabilities.

Surviving are his wife, Mary Josephine; a daughter, Mrs. Harry Phillips, and a son, Paul, who is a student at the University of Notre Dame.

WILLARD N. PUTMAN, M.D., of Battle Creek, Michigan, was born in Depoyster, New York, April 12, 1881, and died in Battle Creek, May 28, 1954. When he was a boy, his family moved to Minnesota. He attended Hamline University and graduated at Hahnemann Medical School, Chicago, in 1906. He interned in Chicago Homeopathic Hospital for one year, then located in Battle Creek, Michigan.

He practiced obstetrics part of the time and is reported to have officiated at more than 3,000 births. Dr. Putman was coroner for thirty-two years, establishing a record. He served in an Ambulance Corps during the first World War, directly under Colonel Percy Jones, from whom the hospital in Battle Creek received its name.

Dr. Putman was a member of the American Legion, past Commander of General George A. Custer Post, member of 40 and 8; life member of Calhoun County Medical Society, Michgan State Medical Society, American Medical Association, the National Association of Military Surgeons, and the United States Army Ambulance Association. He was an active Mason, and a life member of many of its groups.

On December 16, 1908, he married Mary Elizabeth Gatiss, a nurse, who survives. They have one son and three grandchildren.

HENRY J. PYLE, M.D., of Muskegon, died suddenly January 12 at the age of sixty-one.

Dr. Pyle, a past President of the Muskegon County Medical Society, had practiced in Muskegon since 1919, going there directly from service as an officer in the Army Medical Corps during World War I. Among his many other activities, he was school physician from 1920 t 1944.

Born in Zeeland, Dr. Pyle was graduated from Hope College in 1913, then attended medical school at Columbia University, receiving his M.D. degree in 1917. He practiced medicine in Grand Rapids for one year before entering the Armed Forces.

Widely known in his home community, Dr. Pyle was

(Continued on Page 806)



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1. Rev. Gastroenterology 20:744 (Oct.) 1953; abstract in J. A. M. A., 153:1580 (Dec. 26) 1953.

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HENRY J. PYLE, M.D.

(Continued from Page 804)

a member of the Rotary Club and a leader in First Congregational Church. He was a senior member of the medical staff at Hackley Hospital, and its secretary for twelve years.

Dr. Pyle is survived by his wife, Anna; two sons, Donald L. Pyle, of Muskegon, and Robert H. Pyle of Philadelphia; a daughter, Mrs. Richard Coone of Victoria, Texas, and two grandchildren.

B. H. SHEPARD, M.D., died unexpectedly April 8, 1954, at his home in Lowell, a community which he had served since shortly after his graduation from the University of Michigan Medical School in 1917. Dr. Shepard was sixty-six years old.

He was formerly vice president of the Kent County Medical Society and had been active in many community affairs in Lowell. Dr. Shepard was a charter member and past president of the Lowell Rotary Club, and for twelve years served on the Village Council. He was one of the chief organizers and promoters of 4-H work in Kent County.

Since 1920, he had been a member of the staff at both Blodgett Memorial and St. Mary's Hopsitals in Grand Rapids.

Dr. Shepard is survived by his widow, Laurie; two sons, James Terrell and Richard Alan, and three sisters.

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Surgical Anatomy and Clinical Surgery, two weeks, August 23, October 25
Surgery of Colon and Rectum, one week, September 13
Basic Principles in General Surgery, two weeks, September 20
Breast and Thyroid Surgery, one week, October 25
Thoracic Surgery, one week, October 11
Esophageal Surgery, one week, October 4
General Surgery, two weeks, October 4, one week, October 4
Gallbladder Surgery, ten hours, October 25
Fractures and Traumatic Surgery, two weeks, October 25
GYNECOLOGY—Office and Operative Gynecology, two weeks, September 20
Vaginal Approach to Pelvic Surgery, one week, September 13
OBSTETRICS—General and Surgical Obstetrics, two weeks, October 4
MEDICINE—Two-week Course September 27
Electrocardiography and Heart Disease, two weeks, October 11
Gastroenterology, two weeks, October 25
Gastroscopy, one week, September 13
RADIOLOGY—Diagnostic Course, two weeks, October 4
Clinical Uses of Radio Isotopes, two weeks, October 4
PEDIATRICS—Clinical Course, two weeks, by appointment
Congenital and Rheumatic Heart Disease in Infants and Children, one week, October 11 and October 18. Two weeks, October 11
UROLOGY—Two-week Urology Course, September 20
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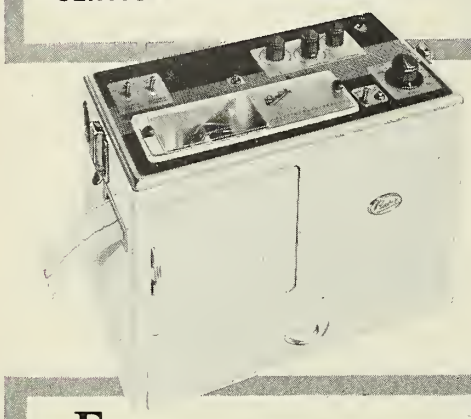
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Communications

Dr. William Bromme, Chairman
Council of the Michigan State Medical Society
10 Peterboro
Detroit, Michigan

Dear Doctor:

The Flint Academy of Surgery, an organization of leading surgeons in this community, feels its obligation to you in sparking the drive to preserve the home of Beaumont on Mackinac Island.

We feel that the Council, through the untiring efforts of Dr. Otto Beck, has rightfully focused the attention of the world right here in Michigan to medicine's most classical experiment in clinical physiology. The Beaumont Memorial will stand in mute testimony that scientific endeavor and analysis often consists in expanding an opportunity into a true experiment, with whatever means at hand.

May we all be inspired by this beautiful little building and hope that, in future time, medicine will again be enriched by that happy circumstance of rare opportunity and intuitive genius so well shown in the Beaumont Story.

Flint Academy of Surgery
Flint, Michigan

Yours sincerely,
EDWIN P. VARY, M.D.
President

June 11, 1954

* * *

Edwin P. Vary, M.D., President
Flint Academy of Surgery
714 Beach Street
Flint, Michigan

Dear Doctor Vary:

Thank you for the thoughful approbation of the Beaumont Restoration Project of the Michigan State Medical Society. The Council has served as a catalyst in this memorial—the real sponsors being the membership of the Society. It is heartening to your Council to know that a strong and solid group like the Flint Academy of Surgery approves our activity.

The real single credit belongs entirely to Doctor Otto Beck for the vision was his. I think we may never know all the problems he solved in converting an idea into a magnificent testimonial to a fellow physician—Doctor William Beaumont.

Faithfully,

WILLLIAM BROMME,
Chairman of the Council
Michigan State Medical Society

June 15, 1954

* * *

William Bromme, M.D.
Chairman, Council
Michigan State Medical Society
Detroit, Michigan

Dear Doctor Bromme:

During the last session of the State Legislature, a bill was introduced proposing that all positive and suspicious laboratory findings for venereal and communicable diseases be reported to the State Health Department by all registered laboratories, together with the name and address of the patient and the name and address of the doctor in attendance. This bill passed the House but died in the Senate Public Health Committee.

(Continued on Page 810)

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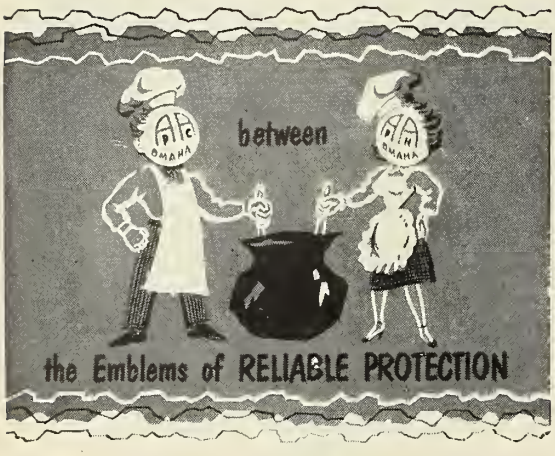
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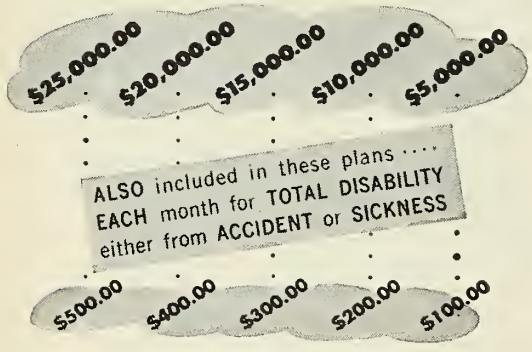
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(Continued from Page 808)

Similar bills were proposed in previous Legislatures but they also died in Committee.

The Michigan Pathological Society and the Council of the Michigan State Medical Society have resolutions that disfavor this type of legislation because:

1. The medical profession does not know about this bill.

2. The bill would penalize every registered hospital laboratory if it would not comply.

3. The Pathologists, and, or, registered laboratories are consultants only, and have no patients of their own. This type bill would defeat the confidential nature of the physician-patient relationship.

4. The relationship between the attending physician and the Pathologist would have a good chance of being severely strained by the releasing of this information. This relationship must be kept at its highest level.

The Genesee County Medical Society has drawn up the enclosed resolution and requests that this information be given to all members of the Michigan State Medical Society.

Very sincerely,
(signed) J. B. Rowe
J. B. Rowe, M.D., *Secretary*
Genesee County Medical Society

Flint, Michigan
June 8, 1954.

TO; Council, Michigan State Medical Society
Secretaries, County Medical Societies, MSMS
Michigan Pathological Society

RE Proposed legislation that all positive and suspicious laboratory findings for venereal and communicable disease be reported to the State Department of Public Health by all Registered laboratories, together with, name and address of patient and address of the doctor in attendance.

Whereas, present regulations require the attending physician to report all patients having venereal and communicable disease to the Public Health authorities, and

Whereas, the present regulation need only to be enforced in order to register records, regulate or follow-up patients with venereal or cummunicable disease, and

Whereas, the diagnosis of venereal or cummicable disease resides morally, physically, and legally only in the physican attending the patient, and

Whereas, registered laboratories doing consultant procedures, techniques, tests, experiments, etc., are in fact morally, ethically and legally not diagnostic of venereal or communicable diseases, suspicious or otherwise, and

Whereas, many registered laboratories are not directed by a Doctor of Medicine, and sometimes not even by a registered technician, and

Whereas, any legislation aimed at the transferring of the responsibilities of reporting patients with venereal or communicable disease from the attending physician to registered laboratories or any other person or agency is, in fact, morally, ethically, and legally irresponsible, contary to existing regulation, inadvisable and in direct conflict with present physician-patient relations, and the general practice of medicine in the State of Michigan; therefore be it

Resolved, that the Genesee County Medical Society in formal session on April 27, 1953, is opposed to any changes or alterations in the present regulations requiring the reporting of patients with venereal or communicable disease by the attending physician to Public Health authorities, local or State.
June 7, 1954



Dear Doctor Haughey:

I am presenting for your consideration the policy of the Michigan Department of Health concerning the distribution of immune serum globulin this summer.

A. *Measles*

(1) Immune serum globulin is available for the prevention or modification of measles for all age groups.

(2) The dose for modification is .02 cc. per pound body weight 5-6 days after exposure and the dose for prevention is .1 cc. per pound body weight as soon after exposure as possible.

B. *Infectious Hepatitis*

(1) Immune serum globulin is available for household or equivalent contacts of cases of infectious hepatitis.

(2) The dose is 0.2 cc. per pound body weight and all age groups are eligible.

C. *Poliomyelitis*

(1) Poliomyelitis immune globulin will not be available for single family units this year since there is no evidence that the use of the product in single family units last year either prevented secondary cases or modified their severity if they did occur.

(2) Poliomyelitis immune globulin is available for group inoculations provided that the group is larger than a single family unit, such as a neighborhood, an apartment house, a camp, an area or a district within a community. The character and size of the group shall be determined by the local full-time health officer.

(3) If community-wide inoculations are contemplated, prior approval must be obtained from the Michigan Department of Health.

(4) The dose is 0.2 cc. per pound body weight instead of last year's dose of 0.14 cc. per pound body weight.

ALBERT E. HEUSTIS,
Commissioner

Lansing, Michigan
May 23, 1954

* * *

Dear Dr. Haughey:

I am a Michigan doctor who was in service before, and I have been involuntarily recalled as a reservist. I have never had the pleasure of meeting you, but thought that I would write you (as Editor of THE JOURNAL of the Michigan State Medical Society) and acquaint you with some of the "creeping socialization" of medicine that is occurring in the services. I think this is a matter that concerns us all. I shall be out at the latest in November, so it isn't purely a personal motivation prompting me to write.

I am stationed at Ft. Benning, Georgia. There are fifty-six doctors here (this is subject to a mild fluctuation so I may be off the total figure by a few.) Of this number, at this date, there are six doctors full time in pediatrics, five doctors full time in obstetrics, and four doctors full time in the dependent's dispensary. That makes a total of fifteen doctors full time on dependent medical care. Also, most of the doctors, including myself, devote considerable time to dependent care. I am the dermatologist here and 50 per cent of my time is spent on dependent care. Most of the other doctors are also spending considerable time on dependents. The dispensary and the hospital at night are serviced by an O.D. schedule. The hospital patients give us but little trouble. However, we are rushed at night treating dependents

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with colds, headaches, et cetera, because it is more convenient to drop in at night. Dependent care is not sought as a favor here, it is insisted upon as a right. This is what we were drafted for—a plan for socialized medicine for Army dependents—an involuntary plan for most of the doctors.

Within the last few weeks, Dr. Frank B. Berry, Assistant Secretary of Defense, was here with his committee. They presented a plan, or I should say legislation, providing for legalization of medical dependent care with further medical care sought for those off army posts, et cetera. Dr. Berry stated that most army personnel are inadequately paid—that it is estimated that the average family could get adequate medical and dental care for $300 to $400 a year. He said that some propose raising the military pay that much as a solution; however, if such were done many of these people would buy new cars instead. This certainly sounds like socialized thinking to me—the welfare state—and a step further down the road to socialized medicine.

Sincerely

HAROLD E. USNDEK, M.D.
(Capt. M.C.)

Army Hospital
Ft. Benning, Georgia
May 21, 1954

THE TAXING GOVERNMENT, AND CHILDREN

Only $600 is allowed in income tax deductions for the support of a child. Working mothers are not allowed to deduct for the pay of baby-sitters, or for nursery care of babies so they can work. But the worst we just discovered. Our secretary wishing to buy a diaper bag for a new mother discovered that if it is a diaper bag it must pay a federal tax. She bought a plastic food bag, the same thing, but without a federal tax.

In Viewing the VA Medical Program . . .

how VA facilities are being used

Patients Discharged During 1951

	TOTAL	SERVICE CONNECTED		NON SERVICE CONNECTED	
TB	21,388	10,550 = 2.1%		10,838 = 2.1%	
NP	47,673	16,530 = 3.2%		31,143 = 6.1%	
GM&S	442,834	51,820 = 10.1%		391,014 = 76.4%	
TOTAL	511,895	78,900	15.4%	432,995	84.6%

The medical profession recommends that VA medical care be maintained for treatment of all service-connected cases and temporarily for all wartime veterans suffering from tuberculosis or neuropsychiatric disorders of non-service-connected origin, within limits of existing VA facilities, if they cannot afford private medical care. General medical and surgical patients with non-service-connected disabilities (now 76.4% of all VA patients) should not be entitled to "free" federal medical care.



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Lynn A. Ferguson, M.D., James A. Ferguson, M.D., Ben R. Van Zwalenburg, M.D., and Edward F. Ducey, M.D., Grand Rapids, are the authors of an article entitled "Clinical X-Ray Staff Conferences on the Colon. III. The Importance of Barium Enema in Anorectal Cases," published in *The American Journal of Gastroenterology,* May, 1954.

Merle Lawrence, Ph.D., and Cyrus L. Blanchard, M. D., are the authors of an article entitled "Prediction of Susceptibility to Acoustic Trauma by Determination of Threshold of Distortion," published in the *University of Michigan Medical Bulletin,* April, 1954. This study is also reported in *Industrial Health and Surgery,* May, 1954.

Philip Rubin, M.D., and Fred J. Hodges, M.D., Ann Arbor, are the authors of an article entitled "The Relationship between Pernicious Anemia and Gastric Neoplasm," published in the *University of Michigan Medical Bulletin,* April, 1954.

John J. Grebe, D.Sc., Midland, is the author of an article entitled "The Medical Man and Civil Defense" published in the *Armed Forces Chemical Journal,* March-April, 1954, and reprinted from THE JOURNAL of the Michigan State Medical Society, March, 1951.

Harris V. Lilga, M.D., Petosky, is the author of an article entitled "Practical Management of Constipation," published in GP, May, 1954.

John W. Keyes, M.D., and Conrad R. Lam, M.D., Detroit, are the authors of an article entitled "Recurrence of Mitral Stenosis Following Commissurotomy" published in *The Journal of the American Medical Association,* May 15, 1954.

F. D. Dodrill, M.D., Detroit, is the author of an article article entitled "Resection of Arteriosclerotic Abdominal Aneurysm with Grafting: Case Report," published in *The Harper Hospital Bulletin,* January-February, 1954.

Vance Fentress, M.D., and Ruth Campbell, M.D., are authors of an article entitled "Splenectomy in Felty's Syndrome: Case Report," published in *The Harper Hospital Bulletin,* January-February, 1954.

William S. Reed, M.D., Ann Arbor, is the author of an article entitled "The Causes of Massive Gastrointestinal Hemorrhage as Observed in Necropsy Material," published in the *University of Michigan Medical Bulletin,* March, 1954.

Harold E. Kleinert, M.D., Louisville, and **Alfred M. Large, M.D.,** Detroit, are the authors of an article entitled "Anastomosis of the Obstructed Common Bile Duct to the Intestine," published in *AMA Archives of Surgery,* April 1954.

Charles S. Stevenson, M.D., Detroit, is the author of an article entitled "Recent Advances in the Treatment of Severe Pelvic Inflammatory Disease," published in *The Wayne University College of Medicine Bulletin,* March, 1954.

F. E. Greifenstein, M.D., Detroit, is the author of an article entitled "Ventilatory Tests of Lung Function," published in *The Wayne University College of Medicine Bulletin,* March, 1954.

J. W. Keyes, M.D., and C. R. Lam, M.D., Detroit, are authors of an article under "Clinical Notes" in JAMA of May 15, 1954. The manuscript was entitled "Recurrence of Mitral Stenosis Following Commissurotomy."

C. E. Rupp, M.D., H. R. Marvel, M.D., and E. L. Quinn, M.D., all of Detroit, are co-authors with R. J. Ryan, M.D., Chicago, of "Typhus Fever (Brill's Disease) Complicated by Diabetes Insipidus" which appeared under clinical notes in JAMA of May 29.

* * *

Final steps in the activation of the American College of Gastroenterology were taken by the Fellowship of the National Gastroenterological Association at a special meeting recently held in New York City.

At this meeting, it was voted to transfer the membership of the National Gastroenterological Association, classified as to their present status, to the American College of Gastroenterology. A transfer of all the assets including the official publication, *The American Journal of Gastroenterology,* to the College was also voted upon.

Officers of the College are: Sigurd W. Johnson, M.D., Passaic, N. J., President; Lynn A. Ferguson, M.D., Grand Rapids, Mich., President-elect; James T. Nix, M.D., New Orleans, La., 1st Vice-President; Arthur A. Kirchner, M.D., Los Angeles, Calif., 2nd Vice-President; C. Wilmer Wirts, M.D., Philadelphia, Pa., 3rd Vice-President; Frank J. Borrelli, M.D., New York, N. Y.,

(Continued on Page 816)



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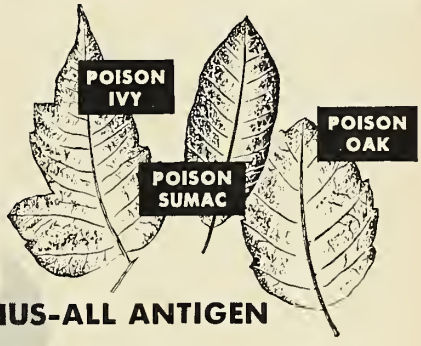
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The College will hold its first convention in Washington, D. C., October 25, 26 and 27, 1954, in conjunction with the 19th Annual Convention of the National Gastroenterological Association.

Information concerning membership in the American College of Gastroenterology may be obtained by writing to the Executive Secretary, American College of Gastroenterology, 33 West 60th St., New York 23, N. Y.

* * *

At the annual meeting of the American Association for Thoracic Surgery on May 4, 1954, in Montreal, Richard H. Meade, M. D., of Grand Rapids, was elected Vice President (President Elect).

* * *

The Michigan Rheumatism Society held a dinner meeting on Wednesday, May 26, 1954, at the Wayne County Medical Society Headquarters.

The following officers were elected for the coming year:

President—Elmore C. Vonder Heide, M.D., Detroit
Vice President—Ivan F. Duff, M.D., Ann Arbor
Secretary-Treasurer—Dwight C. Ensign, M.D., Detroit

The scientific program was as follows:

"Clinical and Laboratory Effect of Long-Term Intra-Articular Hydrocortisone in Rheumatoid Arthritis"—Ivan Duff, M.D.

"Abnormal Urinary Steroid Patterns in Gout"—William Wolfson, M. D.

"Microradiographic and Magnification Techniques in the Study of Osteoarthritis"—James Lofstom, M.D.

"Research in Rheumatic Diseases at the Royal Free Hospital"—Ernest Fletcher, M.D.

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Dr. Fletcher is Physician-in-Chief at the Rheumatism Department and lecturer on chronic rheumatic diseases at the Royal Free Hospital in London. He is a member of the Empire Rheumatism Council and a former officer of the Heberden's Society. He gave the Heberden lecture, the annual lecture sponsored by the Heberden Society, in 1939. He is author of the textbook, "Medical Disorders of the Locomotor System, Including the Rheumatic Diseases."

* * *

Ethical Eye Physicians and Glasses—At the regular monthly meeting of the Saginaw Valley Academy of Ophthalmology and Otolaryngology, at Saginaw, Michigan, May 4, 1954, the following resolutions were presented to the Society.

1. RESOLVED: This Society considers that an Eye Physician renders service of great importance when he delivers glasses to a patient at his office.

2. RESOLVED: This Society considers it not only ethical, but desirable, for Eye Physicians to fit and deliver glasses to patients at his office.

3. RESOLVED: This Society considers it desirable for Eye Physicians having a reason to do so, to send patients to an optician for conference in regard to a pair of glasses the optician is to make for the said Eye Physician.

4. This Society is opposed to any law, or regulation, preventing an Eye Physician from 1. fitting or 2. delivering glasses to a patient he has refracted.

A motion was made and seconded that these resolutions be adopted. The resolutions were passed unanimously.—WM. B. HUBBARD, M. D.

* * *

Post Office Urges More Careful Blood Packaging—An assistant postmaster in Chicago recently complained that many doctors are mailing blood specimens in glass vials placed in metal screw-topped cardboard tubes to private and governmental laboratories and, because of carelessness in screwing the tops on securely, the vials slip from the tubes, are broken, and the blood stains other mail. He pointed out one important fact from the doctor's viewpoint; if the postal employee re-inserts the vials in the tubes, who knows whose blood goes into whose tube?

The assistant postmaster said the same trouble exists in other postal centers and urged us to publicize what he called "this dangerous nuisance."

He urged doctors to place an adhesive (not scotch tape) across the metal top and down the sides of the container. This, he said, will prevent the insecurely screwed tops from coming off.—*AMA Secretary's Letter.*

* * *

Word has just been received of the death of Agnes V. Edwards, Managing Editor of the *Virginia Medical Monthly,* on Saturday, May 22. Starting as a part-time employe of the journal which was founded in 1874 by her father, Dr. Landon B. Edwards, she has managed

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the *Virginia Medical Monthly* since World War I. In 1924, she was elected Business Manager and Executive Secretary-Treasurer of the state society, a post held for many years. The August 1951 issue of the *Virginia Medical Monthly* was dedicated to Miss Edwards "in view of her long and faithful service" to the journal and the medical society.

* * *

Dr. Fount Richardson, Fayetteville, Arkansas, has been named Editor of the *Journal of the Arkansas Medical Society.* He succeeds Dr. W. R. Brooksher who resigned after 20 years of service.

* * *

A three-day International Symposium on the "Hypophyseal Growth Hormone, Its Nature and Actions" is being sponsored by the Henry Ford Hospital and the Edsel B. Ford Institute for Medical Research. The Symposium will be held in the New Clinic Building Auditorium of the Henry Ford Hospital, October 27, 28 and 29, 1954.

Formal presentations and discussions will cover the following aspects of growth hormone investigation: bioassay, preparation and physicochemical properties of growth hormone; effects of growth hormone on certain structures such as the mammary gland, skeletal system, connective tissues, Islets of Langerhans, kidneys, gastrointestinal tract and tissue cultures; growth hormone and energy sources; the effect of growth hormone on cellular systems; the influence of growth hormone on lactation: and its metabolic effects in man.

Interested persons should write the Program Committee, Henry Ford Hospital, Detroit 2, Michigan. Invitations will be sent to as many persons as possible.

* * *

Medical television shows, over WJBK-TV, sponsored by the Michigan Health Council, were presented in May as follows:

May 9—"Hospital Week"—Mrs. Ira W. Henderson, Livonia; Judith M. Blue, Detroit; Barbara Jewett, Detroit.

May 16—"The Child with Epilepsy"—H. Waldo Bird, M.D., Detroit; Charles G. Jennings, M.D., Detroit.

May 23—"Helping the Child to Grow Healthfully"—Mrs. Ernestine Donnell, Lansing; Mrs. Pauline Schmookler, Lansing; G. Robert Koopman, Lansing.

May 30—"A Citizen Participates"—Film.

* * *

Future meetings on cancer control:

1. Sixth Michigan Cancer Conference, Kellogg Center, East Lansing, Thursday, October 14.

2. American Cancer Society, New York City autumn, 1954.

* * *

Twenty-five members of the Genesee County Medical Society inspected Parke, Davis & Company's Research Bldg. in Detroit on April 28. P-D drug discoveries range from Adrenalin in 1900 to Chloromycetin in 1949.

* * *

Blue Cross and Blue Shield is meeting more than 50 per cent of medical care costs in prolonged absences from employment according to a study made by the Research Council for Economic Security. A "prolonged absence" is one of four consecutive weeks or longer.



"What's New, Doctor, That You Can Use!" is the theme of the 1955 Michigan Clinical Institute to be held at the Sheraton-Cadillac Hotel, Detroit, March 9-10-11, 1955. Color television again will be featured at the M.C.I., through the courtesy of Smith, Kline & French Laboratories, Philadelphia.

The program for this unusual three-day presentation is being arranged by a Committee composed of C. E. Badgley, M.D., Ann Arbor, Chairman; H. H. Cummings, M.D., Ann Arbor; Grover C. Penberthy, M.D., Detroit; Wm. S. Reveno, M.D., Detroit, and H. A. Towsley, M.D., Ann Arbor.

L. J. Hirschman, M.D., Traverse City, is General Chairman of Arrangements for the 1955 M.C.I.

* * *

Walter F. Anderson, M.D., Detroit, has been given the Frederick A. Coller Award, made annually to the doctor of medicine submitting the best paper on the care and nutrition of the injured person. The award was made in Ann Arbor on May 20. Dr. Anderson's manuscript was entitled "Spinal Cord Regeneration."

* * *

Homer H. Stryker, M.D., Kalamazoo, as President of the Orthopedic Frame Company, presented a $500 scholarship award to Kerry D. Smalla, a senior at the Otsego, Michigan, High School, to aid in the study of industrial arts at Western Michigan College. This was the second grant made by Dr. Stryker and his medical equipment manufacturing firm as a means of encouraging interest in industrial arts among highly qualified high school students.

* * *

Kenneth B. Babcock, M.D., Detroit, has accepted the position of Executive Director of the Joint Commission on Accreditation of Hospitals. Long-time Director of the two Grace Hospitals in Detroit, Dr. Babcock will move to Chicago as of July 1.

Congratulations and full success, Dr. Babcock!

* * *

You are cordially invited to join the other 2751 progressive members of the Michigan State Medical Society who are expected at the MSMS annual session, Sheraton-Cadillac hotel, Detroit, September 29-30-October 1, 1954.

The present tops for M.D. attendance at MSMS conventions was made in 1948. With the 2751 who attended the Detroit meeting that year repeating their performance in 1954, plus you, Doctor, the current year's attendance will be the all-time record. Be there!

* * *

The 19th Annual Congress of the United States and Canadian Sections of the International College of Surgeons will be held in Chicago at the Palmer House, September 7-8-9-10, 1954. The Woman's Auxiliary will meet on Monday, September 6. For program write co-Chairman Raymond W. McNealy, M.D or Karl A.

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Meyer, M.D., 1516 Lake Shore Drive, Chicago 10, Illinois. Honorary Chairman of the Program Committee is Wayne W. Babcock, M.D. of Philadelphia. Section meetings will be held on obstetrics-gynecology; orthopedics, reconstructive surgery; neurosurgery; ophthalmology; otorhinolaryngology; coloproctology; urology, occupational surgery.

A special three-day course for operating room and surgical nurses will be held in conjunction with the Congress.

* * *

Members of the medical profession are being invited to attend the International Association of Industrial Accident Boards and Commissions annual convention Chateau Frontenac, Quebec, Canada, October 3-7, 1954.

The majority of the program will be devoted to the medical problems of workmen's compensation, even though the members of this Association are workmen's compensation administrators interested mainly in recent legislation and other aspects of compensation.

For program and complete information, write C. M. Peterson, M.D., AMA, 535 N. Dearborn, Chicago 10, Illinois.

* * *

Wm. J. Stapleton, Jr., M.D., Detroit, was honored at a testimonial dinner in Detroit on May 11. He was Michigan's Foremost Family Physican for 1953. The dinner was sponsored by Wayne University College of Medicine Alumni Association, the Wayne County Medical Society, and the Michigan State Medical Society. Louis J. Hirschman, M.D., Traverse City, served as toastmaster. Joseph A. Moynihan, presiding Circuit Judge of Michigan, presented the testimonial to Doctor Stapleton.

* * *

The University of Michigan Medical Alumni Reunion will be held in Detroit Wednesday, September 29, coincident with the MSMS Annual Session. The reception and dinner will be held in the English Room of the Sheraton-Cadillac Hotel beginning at 6:30 p.m.

All Michigan medical alumni are requested to make reservations with Dean A. C. Furstenberg, M.D., 1313 East Ann Street, Ann Arbor.

* * *

Wayne University Medical Alumni will hold their usual reunion, reception and dinner, coincident with the MSMS Annual Session, in the English Room of the Sheraton-Cadillac Hotel, Detroit on Thursday, September 30 beginning at 6:30 p.m. The meeting will be followed by the MSMS dance and entertainment at 10:30 p.m. in the Grand Ballroom of the Sheraton-Cadillac.

For reservations and program, write College of Medicine Alumni, c/o Daniel E. Hasley, M.D., Treasurer, 1401 Rivard, Detroit 7, Michigan.

* * *

C. Allen Payne, M.D., Grand Rapids, Chairman of the Michigan Cancer Co-ordinating Committee, addressed the Michigan Practical Nurses Association on "The Role of the Practical Nurse in Cancer Control."

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The occasion was the Tenth Annual Convention of the MPNA in Muskegon.

L. Fernald Foster, M.D., Bay City, and H. W. Brenneman, Lansing, spoke to the MPNA on "The Survival of the Fittest."

* * *

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* * *

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* * *

The Fifth Annual Lectures of the Clara Elizabeth Fund for the Genesee County Medical Society and the Michigan Society of Obstetricians and Gynecologists, will be delivered Wednesday, November 3, 1954, 10:30 a.m. to 4:15 p.m., at the Hurley Hospital Auditorium, Flint, Michigan.

Participants will be:

Russell R. deAlvarez, M.D., Professor and Executive Officer, Department of Obstetrics and Gynecology, University of Washington School of Medicine, Seattle, Washington—"The Toxemias of Pregnancy," "Renal Function in Pregnancy Toxemias," "Patterns of Sodium and Water Metabolism During Ion Exchange Treatment of Pre-eclamptic Toxemia."

J. Robert Willson, M.D., Professor and Head of the Department of Obstetrics and Gynecology, Temple University School of Medicine, Broad Street at Ontario, Philadelphia, Pennsylvania—"Evaluation (primarily diagnosis) and Bleeding in the Last Trimester of Pregnancy" and "The Care of the Infant During Labor and at Delivery" and James L. Wilson, M.D., Professor of Pediatrics, University of Michigan Hospital, Ann Arbor, Michigan—"Initiation of Respiration of the Newborn," "Theory and Practice" (Presentation in two parts).

* * *

BASIC SCIENCE ACT

H. A. Furlong, M.D., Chairman of the Study Committee on the Basic Science Act, reports that unless there were instructions to further amend the Basic Science Law that the Committee would hold no further meetings. Inquiry to the *Basic Science Board* has revealed (as of April 30) the following states have been approved for waiver of taking Basic Science examination: Arkansas, Colorado, Minnesota, Nebraska, Rhode Island, South Dakota, Tennessee and Texas. Approval is still pending (in view of the fact that the examinations have not been received by the Michigan Board for evaluation) for the following states: District of Columbia, Florida, Nevada, New Mexico and Alaska. Those states not approved are: Arizona, Connecticut, Iowa, Oklahoma, Oregon, Washington and Wisconsin. It was felt that there was definite progress made due to the fact that prior to this time only three states had had reciprocal arrangements with Michigan.



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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

RECENT ADVANCES IN CARDIOVASCULAR PHYSIOLOGY AND SURGERY, A Symposium presented by the Minnesota Heart Association and the University of Minnesota, September 14, 15 and 16, 1953. University of Minnesota, Minneapolis. Saint Paul: Minnesota Heart Association, 1954, Price $1.00.

* * *

THE ANTISEPTIC, Monthly Journal of Medicine and Surgery founded by Dr. U. Rama Rau in 1904. Published in Madras, India. April, 1954.

This is a Golden Jubilee number with more than 500 pages, including sixty-eight pages of forward which contain greetings from other journals, colleagues, and advertisers. There are ninety-two pages of advertising. This number has contributions from all over the world with pictures of many of the contributors, including Louis A. Bauer, past president of the American Medical Association, from New York, also doctors from Ohio, Illinois, Washington, Minnesota, New York, Wisconsin, Maryland, Pennsylvania, Louisiana, Washington, D. C. The book is well edited and well executed.

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1. Straub, L. R., p. 60, Cecil's, "The Specialties in General Practice," W. B. Saunders, 1952.
2. Not listed but available: Hack Toe Out and Clubfoot Shoes, Tarso Pronators, Sabel Pre-Walker Clubfoot Shoes.

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1. Cook, M. H.; Free, A. H., and Giordano, A. S.: Am. J. M. Technol. *19*:283, 1953.
2. Gray, C. H., and Millar, H. R.: Brit. M. J. *4824*:1361 (June 20) 1953.

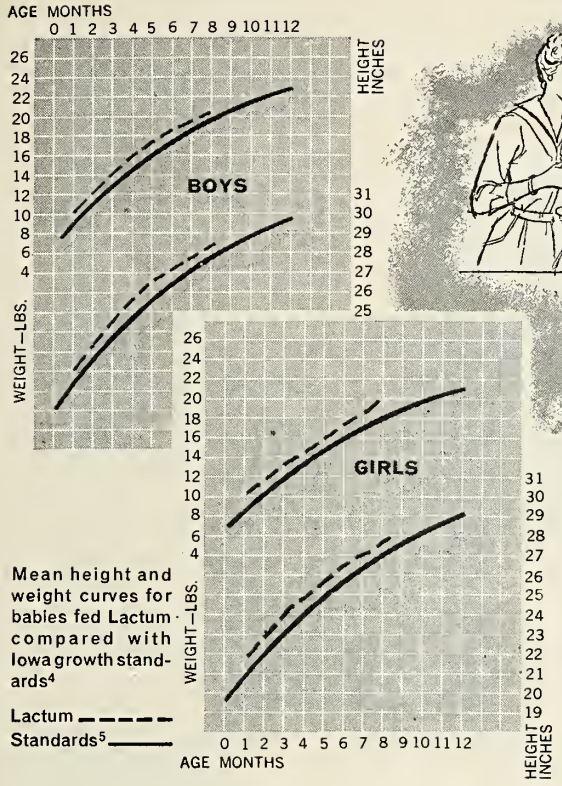
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(1) Jeans, P. C.: In A.M.A. Handbook of Nutrition, Ed. 2, Philadelphia, Blakiston, 1951, p. 275. (2) Albanese, A. A.: Pediat. 8: 455, 1951. (3) Holt, L. E., Jr., and McIntosh, R.: In Holt Pediatrics, Ed. 12, New York, Appleton-Century-Crofts, Inc., 1953, pp. 175-178. (4) Frost, I. H., and Jackson, R. L.: J. Pediat. 39: 585, 1951. (5) Jackson, R. L., and Kelly, H. G.: J. Pediat. 27: 215, 1945.

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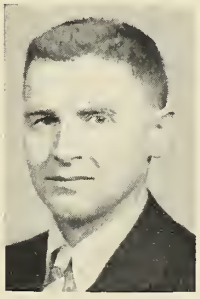
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VOLUME 53 AUGUST, 1954 NUMBER 8

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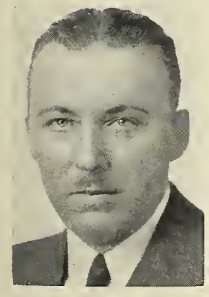
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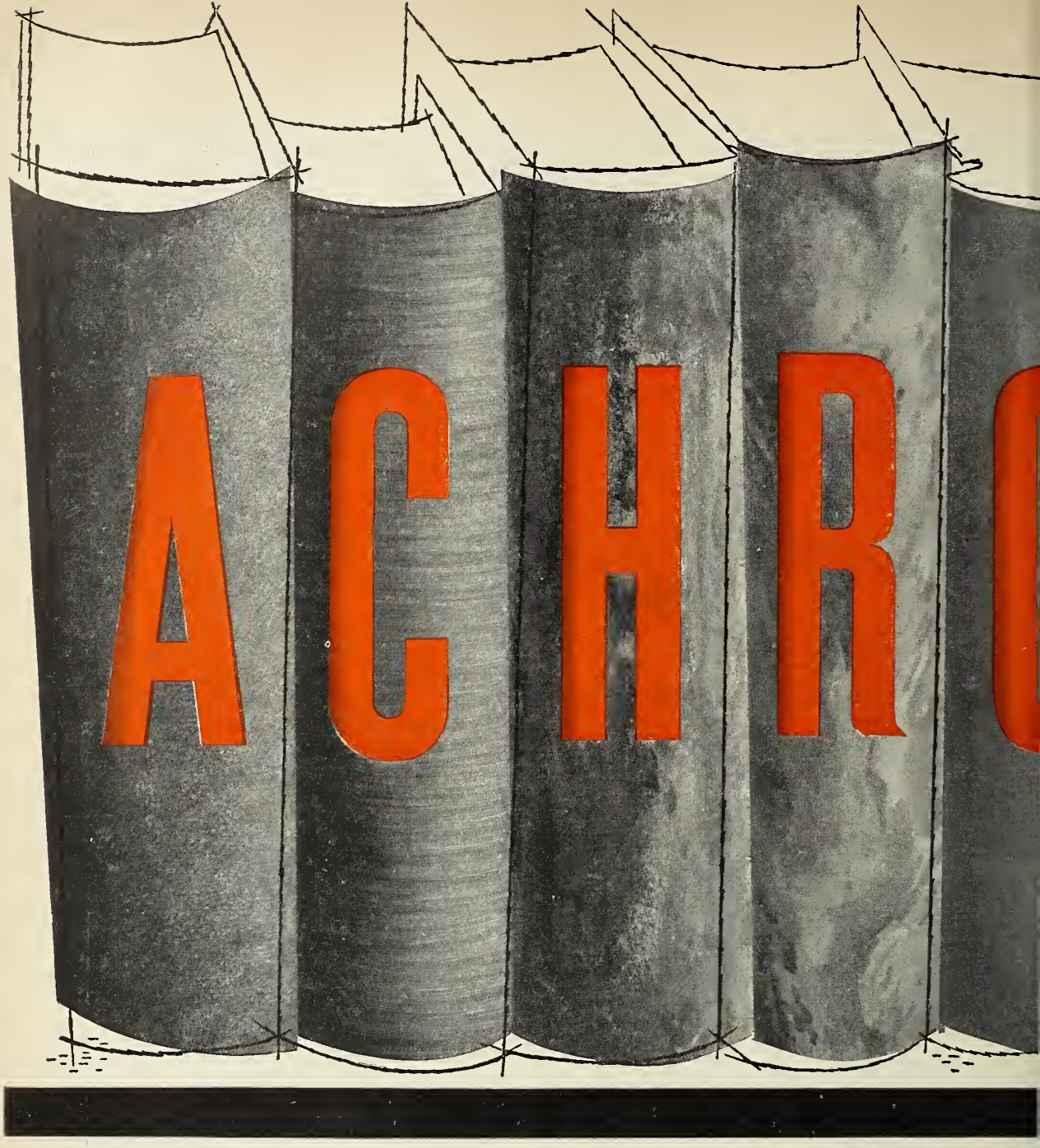
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Meeting of June 9, 1954

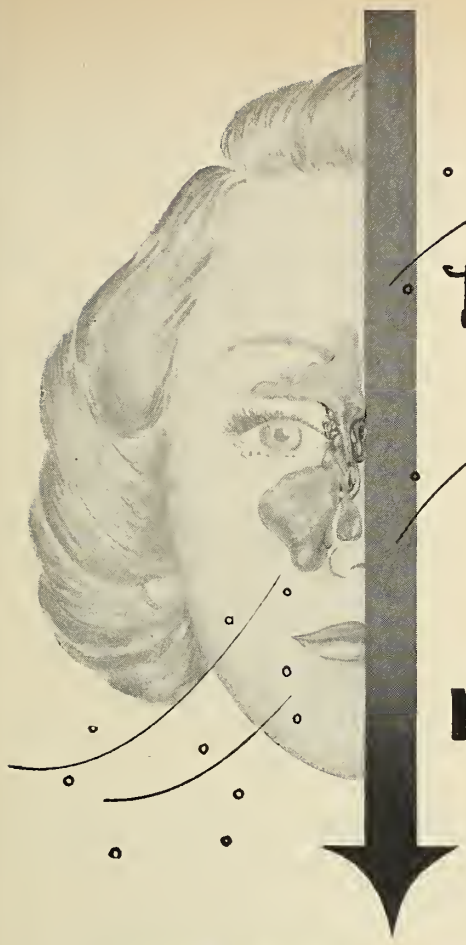
Seventy-nine items were presented to the Executive Committee of The Council at its Detroit meeting of June 9. Chief in importance were:

- *Polio Vaccine.*—Letter from the president of the Oakland County Medical Society on this subject was read. A summarization of the subject is to be published in the Annual Report of The Council, to be presented to the 1954 MSMS House of Delegates in Detroit on September 27; the Oakland County president is to be so advised.
- *Indoctrination of New Members.*—A plan to inaugurate this program of indoctrination at the September 1954 MSMS Annual Session was announced by President L. W. Hull, M.D.
- *For the 1954 Annual Session,* Drs. Wm. M. LeFevre, Muskegon, B. T. Montgomery, Sault Ste. Marie, H. H. Hiscock, Flint, K. H. Johnson, Lansing, W. S. Reveno, Detroit, and Arch Walls, Detroit, were selected as chairmen of the assemblies; Drs. J. R. Brink, Grand Rapids, W. B. Prothro, Grand Rapids; C. D. Benson, Detroit; G. H. Mehney, Grand Rapids, R. F. Fenton, Detroit, and Ferdinand Gaensbauer, Pontiac, were appointed secretaries of the assemblies.

  E. A. Osius, M.D., Detroit, was chosen as discussion conference leader for Wednesday, September 29; Norman F. Miller, M.D., Ann Arbor, for Thursday, September 30; and C. Allen Payne, M.D., Grand Rapids, for Friday, October 1.
- *A meeting with the Executive Committee* of the Board of Commissioners of the State Bar of Michigan, at some future and convenient date, was authorized.
- *John R. Rodger, M.D.,* Bellaire, and *R. W. Teed, M.D.,* Ann Arbor, were chosen as MSMS representatives to the Michigan Health Council.
- *Committee Reports.*—The following reports were given consideration: (a) Liaison Committee with United Health and Welfare Fund, meeting of May 20; (b) Mental Hygiene Committee's meeting of May 20; (c) Committee on Program for 1955 Michigan Clinical Institute, meeting of May 25; (d) Permanent Conference Committee meeting of May 26; approval was given the committee recommendation that MSMS send a copy of the abstract of Report on Survey of Nursing Needs to all MSMS members; (e) Postgraduate Medical Education Committee, meeting of May 27; (f) Public Relations Advisory Committee, meeting of June 4, with announcement that Warren F. Tryloff had been selected as MSMS Field Secretary.
- *Legal Counsel J. Joseph Herbert* reported on six legal matters, including legality of blood alcohol test for intoxication, interruption of pregnancy in case of rape, and status of Grandview Hospital litigation.
- *J. W. Towey, M.D.,* of Powers, Chairman of the MSMS Tuberculosis Control Committee, reported on problems facing county and state tuberculosis sanatoria.
- *The semi-annual meeting* with Michigan's AMA Delegates was held. Present were: W. A. Hyland, M.D., Grand Rapids; J. S. DeTar, M.D., Milan; R. A. Johnson, M.D., Detroit; R. L. Novy, M.D., Detroit, and Surgical Section Delegate Grover C. Penberthy, M.D., Detroit. Eight items were discussed.

  C. I. Owen, M.D., Detroit, Senior Alternate Delegate, was chosen as Delegate to the June, 1954, AMA Annual Session in lieu of W. D. Barrett, M.D., unable to attend.
- *A. E. Heustis, M.D.,* Michigan Health Commissioner, reported on six items of mutual interest, including Commissioner's hospital committee, mass screening examinations, synnematin, and report on convalescent hospital beds.
- *The Public Relations Counsel's report* covered eleven items, including scheduled talks over TV, radio, and before service clubs during MSMS Annual Session distribution of four excellent AMA pamphlets to all MSMS members, work of adult education association of Michigan, multiphasic examination program as favored by the Michigan Heart Association, incorporation of new Michigan Association for Epilepsy on June 2, and plans for motion pictures at Beaumont Memorial Dedication, Mackinac Island, July 17.
- *Clayton K. Stroup, M.D.,* Flint, was appointed

(Continued on Page 836)



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Neo-Synephrine is practically free from sting and compensatory congestion; does not appreciably inhibit ciliary activity. Neo-Synephrine has been found relatively free from systemic side effects such as nervous excitation, cardiac reaction or insomnia even when tested on hypertensive, cardiac and hyperthyroid patients.[1]

0.25% Solutian (plain and aromatic)

0.5% Salutian; 0.25% Spray (unbreakable plastic squeeze bottle)

1% Salution

0.5% water soluble Jelly

1. Van Alyea, O. E., and Donnelly, Allen: *Arch. Otolaryng.*, 49:234, Feb., 1949.

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Neo-Synephrine, trademark reg. U.S. Pat. Off., brand of phenylephrine.

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 834)

as MSMS representative to serve on the advisory committee to the State Board of Alcoholism; W. B. Harm, M.D., Detroit, was appointed MSMS representative to meet with the State Board of Alcoholism.

"WHAT'S NEW, DOCTOR, THAT YOU CAN USE!"

That's the theme of a GREAT MEDICAL MEETING—To be announced in the September number, JMSMS.

Watch for this report, Doctor!

SIXTH MICHIGAN CANCER CONFERENCE

Kellogg Center for Continuing Education
Michigan State College, East Lansing

Thursday, October 14, 1954

Sponsors

Michigan Cancer Co-ordinating Committee
Michigan Division, American Cancer Society
Southeastern Michigan Division, American Cancer Society

Theme

"Cancer Control in the Spotlight"

Presiding—E. I. Carr, M.D., Lansing, Chairman of the Board, Michigan Division, ACS

Registration—8:00 A.M.
Conference Desk—Auditorium

Morning Session—9:00 A.M.

Addresses of Welcome
—Chairman E. I. Carr, M.D., Lansing
—Michigan State College representative

"Breast Cancer" and demonstration—(name to come)

"Cancer of the Lung"—Richard H. Meade, Jr., M.D., Grand Rapids

Intermission (10 minutes)

"Cancer in Children"—C. D. Benson, M.D., Detroit

"Report on Recent Research in Cancer"—Harry M. Nelson, M.D., Detroit

Luncheon (Ballroom)—12:15 P.M.

Presiding—Fred A. Coller, M.D., Ann Arbor, Professor of Surgery and Head of Department, University of Michigan

"Aims and Purposes of the Michigan Cancer Co-ordinating Committee"—C. Allen Payne, M.D., Grand Rapids, Chairman

Question-and-Answer Period—Moderated by Dr. Coller

Recess—2:00 P.M.

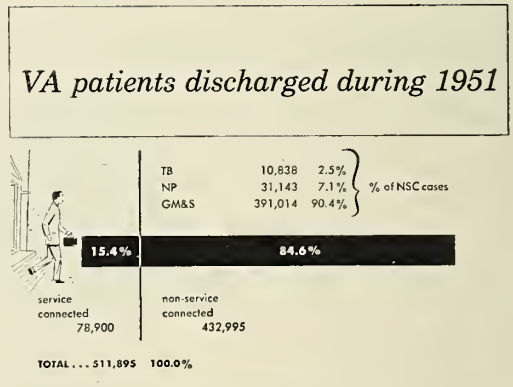
MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954		
Sept. 28	Michigan Branch, American Academy of Pediatrics Clinic and dinner	Detroit
Sept. 29-30 thru Oct. 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
November 3	Clara Elizabeth Fund Lectures Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	San Francisco
1955		
April 13	Tenth Cancer Day Genesee County Medical Society	Flint
May 11	Wayne University College of Medicine Clinic Day and Alumni Reunion	Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

In Viewing the VA Medical Program . . .



Of 511,895 patients discharged from VA hospitals in 1951, only 15.4% were treated for illnesses or injuries incurred as a result of military service. Physicians believe it is unsound to continue authorization of "free" lifetime medical care for those who suffer no mishap while in uniform, while other citizens with no military background must pay their own way.

for most menopausal patients

EFFECTIVE

"...very successful in the relief of symptoms..."[1]

WELL TOLERATED

"...effective maintenance dose is 0.05 mg. or less daily..."[1]

...side effects are minimal.

ECONOMICAL[2]

well within the range of the average patient.

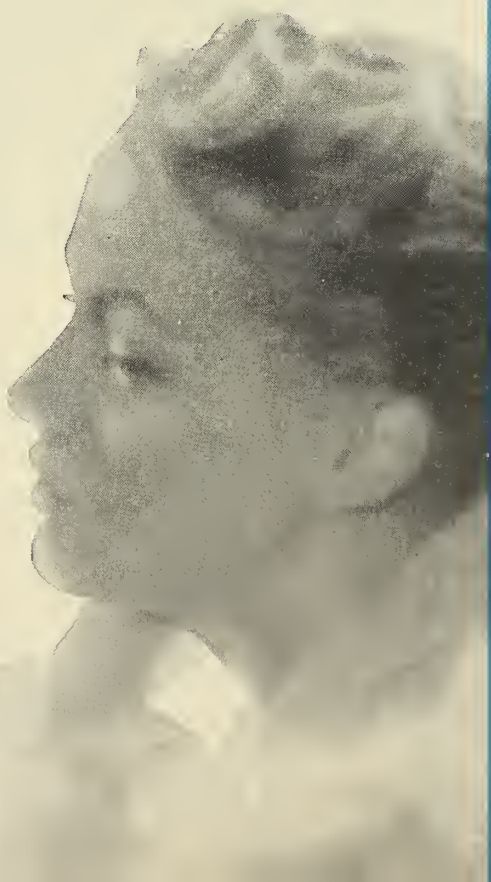
ESTINYL

1. Parsons, L., and Tenney, B., Jr.: M. Clin. North America *34*:1537, 1950.
2. Greenblatt, R. B.: J. Clin. Endocrinol. & Metab. *13*:828, 1953.

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AMA Washington Letter

THE MONTH IN WASHINGTON

During the next three years the federal government expects to help finance the construction of thousands of new medical and dental facilities—diagnostic-treatment clinics, vocational rehabilitation centers, nursing homes, and chronic disease hospitals. Only three strings are attached: the facilities must be non-profit, they must be under medical or dental supervision, and local communities must raise part of the cost.

Legislation establishing the new program was enacted just as Congress plunged into its adjournment rush, and before it had come to final decisions on reinsurance and other major controversial bills in the health field.

The new operation was authorized by amending the Hill-Burton Act (passed in 1946 to assist hospitals) to permit grants to units that do not qualify as hospitals. Under the original Hill-Burton law, grants could be made to rehabilitation centers and diagnostic-treatment clinics only if they were attached to hospitals. Grants could also be made to chronic disease hospitals. The new law authorizes help to centers and clinics operating on their own, a provision Public Health Service expects to be of particular assistance to smaller communities. It also offers aid to nursing homes, which previously were not covered.

In the case of chronic disease hospitals, it is explained that the law offers two new inducements for construction:

1. Money is allocated to the state and earmarked for this particular type of hospital.

2. The federal government will be able to pay 50 per cent or more in all cases, whereas under the old law the U. S. share was as low as one-third in some of the higher-income states.

Grants to clinics, centers, and nursing homes will have to wait on state surveys to determine priorities, according to United States hospital officials. However, if local sponsors take the initiative, grants can be processed immediately for chronic disease hospitals, as earlier Hill-Burton surveys have established their priorities. Failure of communities to construct chronic disease hospitals was one of the disappointments of the first Hill-Burton program.

The first year's appropriation will be $37.4 million, increasing over the next three years until the total authorization of $182 million has been reached. The new projects in no way interfere with the regular Hill-Burton grants for construction of hospitals, for which $75 million is available this year.

The final flurry over the reinsurance bill was preceded by a concerted drive by the administration. The President himself interceded with insurance company officials, and Secretary Hobby agreed to amendments in an effort to satisfy the state insurance commissioners. The commissioners, who would have an important role in administering the reinsurance program, at first had flatly opposed it. President Walter B. Martin and other AMA officials were called in for a discussion of reinsurance at the Department of Health, Education, and Welfare, and later Sherman Adams, assistant to the President, also invited Dr. Martin to a White House meeting on the same subject.

As expected, bills for a new program of medical care of military dependents were left stranded when adjournment time approached. Before he introduced his bill on the subject, Chairman Dewey Short of the House Armed Services Committee insisted that Defense Department estimate first year's additional cost of the program. The estimate was $67 million.

The military scholarships bill met the same fate —too much time taken up in drafting a version that would satisfy all executive departments. Under this plan the Defense Department would grant tuition-and-maintenance scholarships to medical and dental students, in exchange for pledges to spend one year in military service for every subsidized year of training. Both bills are certain to reappear next session.

For the current fiscal year, the Department of Health, Education, and Welfare has available $1,663,413,761. The appropriation bill is $10,904,500 more than the administration requested but under last year's budget of $1,927,432,261 (the decline explained by decreased public assistance grants to states). Public Health Service has $228,060,000 for its regular programs.

Both internists and surgeons must display a greater boldness than they have in the past if lives are to be saved in cancer of the lung.

* * *

Any patient in whom bronchogenic carcinoma cannot be excluded by other means is entitled to an exploratory thoracotomy.

* * *

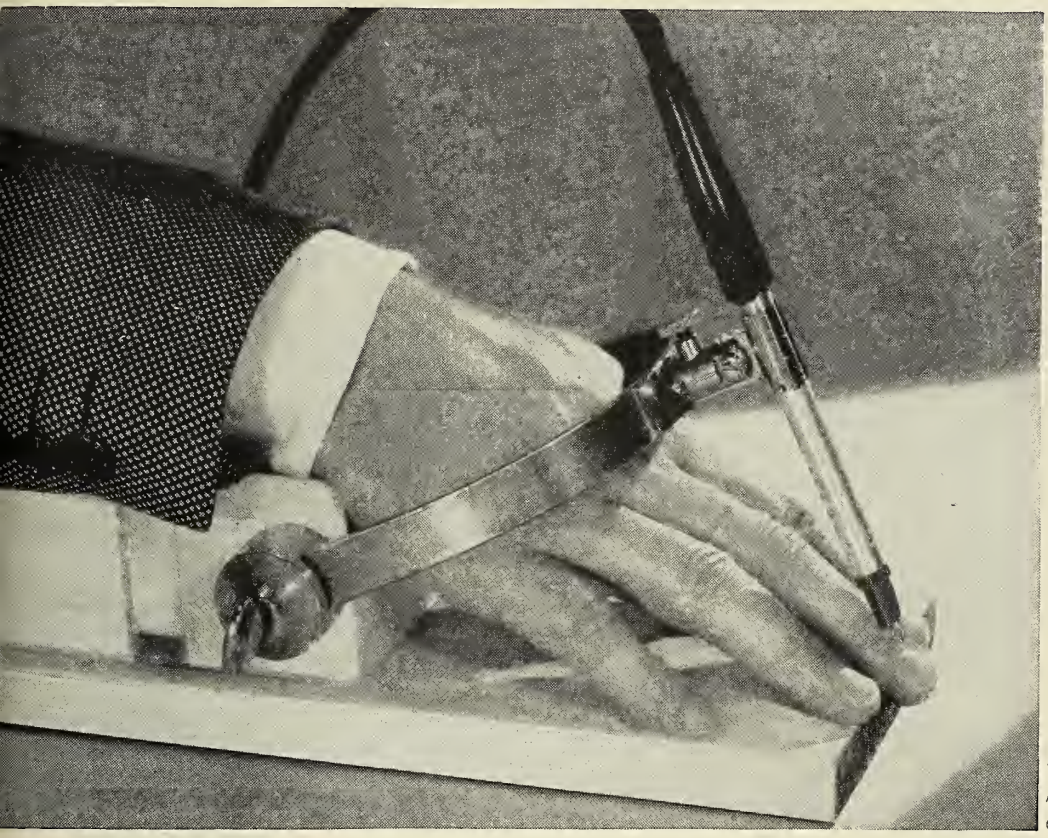
Mitotic figures are not common in lesions of the thyroid, except in obvious carcinoma.

JMSMS

hysiological test

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compare the efficiency of various ers as they affect physiological re- onses in the cigarette smoker, drop surface skin temperature at the last alanx was measured.

Using well-established procedures, e subject smoked conventional filter arettes and the new KENT with e exclusive Micronite Filter.

For every other filter cigarette, the op in temperature averaged over 6 grees. For KENT's Micronite Filter, ere was no appreciable drop.

These findings confirm the results of ner scientific measurements that ow these facts: 1) KENT's Micronite ter takes out *far more* nicotine and tars than any other cigarette, *old or new*. 2) Ordinary cotton, cellulose or crepe paper filters remove a small but ineffective amount of nicotine and tars.

Thus KENT, with the first filter that really works, gives the one smoker out of every three who is susceptible to nicotine and tars the protection he needs . . . while offering the satisfaction he expects of fine tobacco.

For these reasons, smokers have made the new KENT the most popular new brand of cigarette to be introduced in the last 20 years.

If you have yet to try the new KENT with the exclusive Micronite Filter, may we suggest you do so soon?



American Medical Association — Annual Session

San Francisco, June 20 to 25, 1954

Conference on Civil Defense

On Sunday morning, June 20, 1954, occurred the Conference on Civil Defense. The large dining room of the Palace Hotel was crowded to capacity. How doctors and individual citizens must work together to save lives in the event of an atomic attack was the subject of the conference.

C. Joseph Stetler, secretary of the AMA's Council of National Emergency Medical Service which conducted the conference, said the meeting served "to further co-ordinate emergency medical plans and outlined how the individual citizen must participate in helping save American lives in event of an attack."

Among the civil defense authorities present was Dr. Edgar M. Dunstan, Atlanta, Ga., who spoke on the essentiality of a complete medical plan in which all citizens must be directly concerned with dispensing health services.

Dr. Carroll P. Hungate, Kansas City, Mo., told of the civil defense program of Missouri in which every schoolhouse is designated as a medical installation and every church and home is prepared to billet dispersed persons in times of mass evacuation.

Dr. Justin J. Stein of Los Angeles urged frequent evacuation trials and said "natural terrain surrounding the target areas should be utilized as much as possible as evacuation sites."

"What the Japanese experienced in the firecracker stage of the atomic era gives a faint idea of what we must plan to face in case of an atomic attack," Dr. Edward Liston of Palo Alto, Calif., warned.

He advocated extensive use of aircraft in atomic attacks for the treatment and evacuation of casualties and the installation of medical facilities at all airports.

Other participants in the conference were: W. M. Robertson, director of the California State Office of Civil Defense, and Drs. Arlo Alfred Morrison, Ventura, Calif.; Harold C. Lueth, Evanston, Ill.; James S. Tyhurst, Montreal, Canada, and Robert H. Flinn, Washington, D. C., Dr. Stafford L. Warren of Los Angeles was chairman of the meeting.

Conference on Presidents

The tenth annual conference of Presidents and Other Officers of State Medical Societies was held the afternoon of June 20, 1954, in the Gold Ballroom of the Palace Hotel in San Francisco. This is the group originally called together by Andrew Brunk, M.D., President of the Michigan State Medical Society at the time. The attendance filled the Ballroom.

The meeting was opened by an address on "Spheres of Medicine" by the President-elect, Percy E. Hopkins, M.D. Then came a panel discussion on "Doctors and the Press," each fifteen minutes:

"From a Magazine Editor's Point of View"
MR. STEVEN M. SPENCER, Associate Editor of *The Saturday Evening Post.*

"From a Science Writer's Point of View"
MR. ALTON L. BLAKESLEE, Associated Press.

"From a Physician's Point of View"
HERBERT P. RAMSEY, M.D., Co-Chairman, Committee on Blood, American Medical Association, President, The Medical Society of the District of Columbia.

There were two other talks:

"Are Public Relations Programs Worth What They Cost?"
MR. ROBERT L. STEARNS, Director, Boettcher Foundation, Denver, Colorado, former President of University of Colorado.

"Our Common Aims"
MR. JAMES MUSSATTI, General Manager, (Calif.) State Chamber of Commerce, San Francisco, California.

Charles L. Farrell, M.D., of Pawtucket, R. I., was elected President for the ensuing year.

Actions of House of Delegates

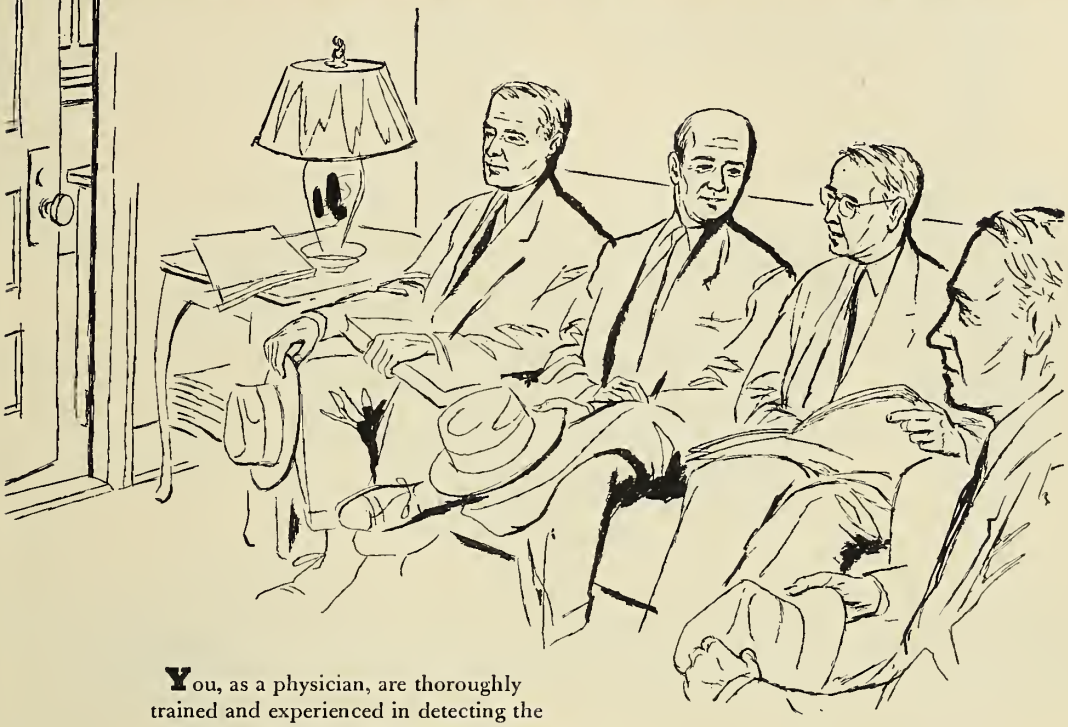
Fee splitting, osteopathy, closed panel medical care plans, veterans' medical care and the training of foreign medical school graduates were among the major subjects of discussion and action during the sessions of the House of Delegates, June 21-25.

Named as president-elect for the coming year was Dr. Elmer Hess of Erie, Pa., who, until his election, was serving as a member of the House of Delegates and as Chairman of the Council on Medical Service. Dr. Hess will become president of the American Medical Association at the June, 1955, meeting in Atlantic City, succeeding Dr. Walter B. Martin of Norfolk, Va. Dr. Martin took office at the Tuesday evening inaugural session in San Francisco's Palace Hotel.

The House of Delegates voted the 1954 Distinguished Service Award of the American Medical Association to Dr. William Wayne Babcock of Philadelphia for his outstanding contributions to medicine and humanity. Dr. Babcock, who was professor of surgery and clinical surgery at Temple University School of Medicine from 1903

(Continued on Page 842)

Is there an engineer in the waiting room?



You, as a physician, are thoroughly trained and experienced in detecting the clinical conditions that affect your patients' physical being. They depend on you completely for a knowledge and guidance not possessed by themselves. Conversely, do you not similarly look to professional men in other fields for aid when the need arises?

For example, when there's the question of quality in the consideration of a new piece of diagnostic equipment — such as an electrocardiograph — an engineer can tell better than anyone, sometimes with just a superficial examination, how well the instrument is designed and made. He notices such things as workmanship, the quality of materials, and the grade of the components. As an engineer he would be sure to see the value in unitized construction in the Viso-Cardiette — amplifier, control panel and recorder as three basic assemblies — and the advantages of inkless recording in true rectangular coordinates. He would remark about the minimum of moving parts, the ruggedness of construction, and the precision instrument quality of the purchased components.



If you are trying to decide which electrocardiograph to buy, we invite this type of comparison between the Viso-Cardiette and any other instrument. To make such an examination of the Viso possible, you may have a Viso for a 15-day trial* without any obligation whatsoever.

* This EXCLUSIVE plan places a Viso-Cordiette in your hands for 15 days. At the end of that trial period, if you are not completely satisfied with the instrument, you simply return it to us and that is all! You're under NO OBLIGATION.

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Actions of House of Delegates

(Continued from Page 840)

to 1944, received the award from Dr. Martin at the Tuesday evening inaugural ceremony.

The final registration total for the San Francisco meeting reached approximately 35,000, including 12,063 physicians.

Fee Splitting.—The House adopted a supplementary report of the Reference Committee on Miscellaneous Business which recommended acceptance of a Judicial Council report on the subject of billing and made the additional recommendation "that the House of Delegates resolve that it firmly opposes fee splitting, rebating or payment of commissions in any guise whatsoever, and that it further opposes any mechanism that encourages this practice."

The Judicial Council report included the following statements:

"The Judicial Council is of the opinion that the only new facet concerning this subject that has come up recently is the ease of joint billing to some of the nonprofit insurance companies. In many cases these insurance companies insist on a joint or combined bill, but the bill is being paid in most instances by two checks. This is not considered unethical and all insurance plans which do not pay the individual physician in this manner should be urged to do so.

"The Judicial Council is still of the opinion that when two or more physicians actually and in person render service to one patient they should render separate bills.

"There are cases, however, where the patient may make a specific request to one of the physicians attending him that one bill be rendered for the entire services. Should this occur it is considered to be ethical if the physician from whom the bill is requested renders an itemized bill setting forth the services rendered by each physician and the fees charged. The amount of the fee charged should be paid directly to the individual physicians who rendered the services in question.

"Under no circumstances shall it be considered ethical for the physician to submit joint bills unless the patient specifically requests it and unless the services were actually rendered by the physicians as set out in the bill."

Osteopathy and Medicine.—Four resolutions dealing with the osteopathic problem were considered. The House accepted a recommendation by the Reference Committee on Medical Education and Hospitals and adopted a Supplementary Report of the Board of Trustees on a Report of the Committee for the Study of Relations Between Osteopathy and Medicine:

"The justification or lack of justification of the 'eultist' appellation of modern osteopathie education could be settled with finality and to the satisfaction of most fair-minded individuals by direct on-eampus observation and study of osteopathic schools. The Committee, therefore, proposed to the Conference Committee of the American Osteopathie Association that it obtain permission for the Committee for the Study of Relations between Osteopathy and Medicine to visit schools of osteopathy for this purpose.

"The Conferenee Committee favorably reeommended this proposal to the board of trustees of the American Osteopathic Association which considered it at a special meeting on February 6 and 7, 1954. It has referred the question to its house of delegates which will act upon the proposal in July, 1954. If the action of the house of delegates of the American Osteopathie Association be favorable, the on-eampus observations can be carried out in the fall of this year.

"The Committee therefore reeommends:

"1. That no action be taken on the report at this time and that final action be deferred until Deeember, 1954.

"2. That the Committee be continued until December, 1954, in order to be available to evaluate education in schools of osteopathy should the house of delegates of the American Osteopathic Association act favorably upon the recommendation of its Conference Committee."

Closed Panel Plans.—The much-publicized New York resolution, calling for several changes in the Principles of Medical Ethics relative to participation in closed panel medical care plans, was considered by the Reference Committee on Miscellaneous Business. That committee made the following recommendation, which was adopted by the House:

"In the discussion before your reference committee on this resolution, it became apparent to the committee that clarification and interpretation of the Principles of Medical Ethics in relation to prepaid medical eare plans are desirable. As set forth in the bylaws, the Judicial Council has jurisdiction on all questions of medieal ethics.

"Therefore, your reference committee reeommends that the House of Delegates request the Judicial Counеil to . . . investigate the relations of physicians to prepaid medical care plans and render such interpretations of the Principles of Medical Ethics as the Council deems necessary, and report to the House of Delegates not later than the next annual meeting of the Association.

"The committee further recommends that the New York resolution be referred to the Judicial Council for consideration in connection with this investigation."

The New York resolution, among other suggested changes, would add the following new paragraph to Chapter I, See. 4, "Advertising," of the Principles of Medical Ethics:

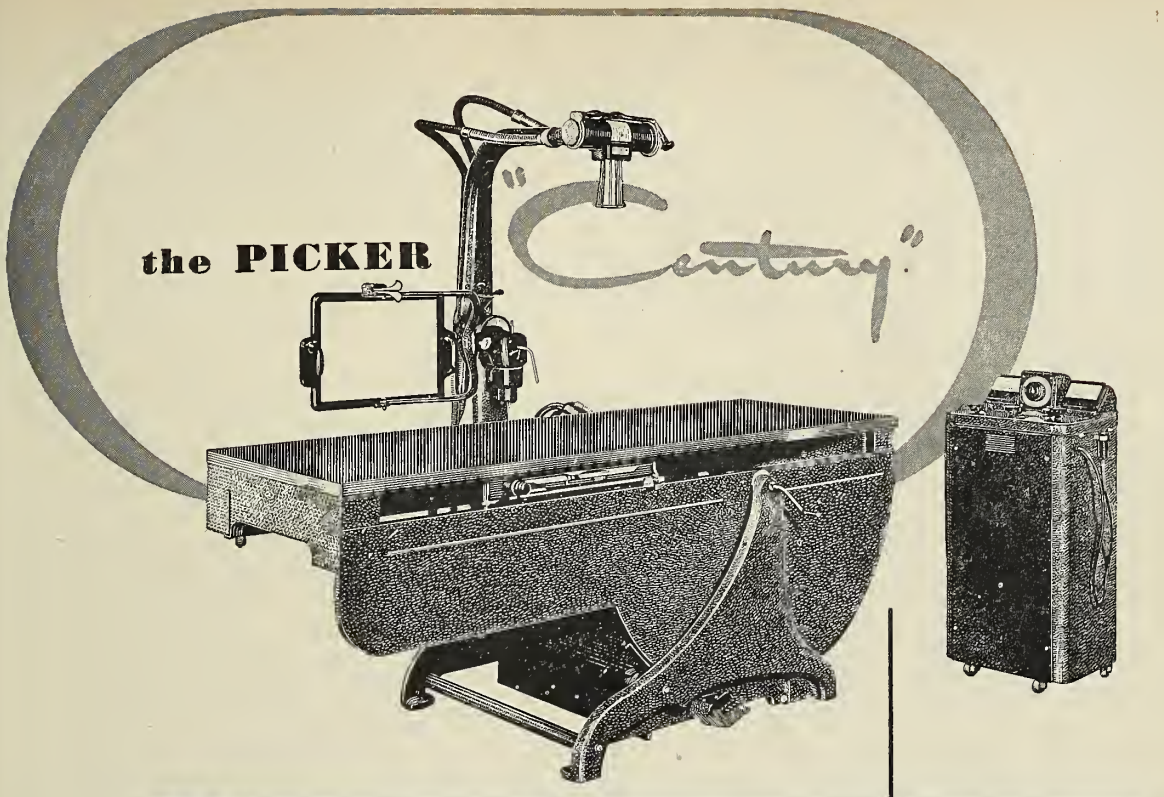
"It shou'd be understood that any medical care plan, company, or organization which advertises for subseribers and directs such subseribers to a restricted panel of physicians for medical eare is advertising for the benefit of the physicians involved."

Veterans' Medical Care.—Accepting a report by the Reference Committee on Legislation and Public Relations, the House adopted two strong resolutions condemning the present practice of establishing service-connection for veterans' disabilities by legislative fiat. In recommending passage of both resolutions, the committee said:

"The study of the chronological expansion by law and regulation, together with evidence presented of pending legislation now before a Congressional Committee, emphasize all too clearly the imperative need of deeisive action on the part of the American Medical Assoeiation.

"It is the opinion of the Committee that the time is at hand when the American Medical Association and its component societies should go all out in preventing this

(Continued on Page 846)



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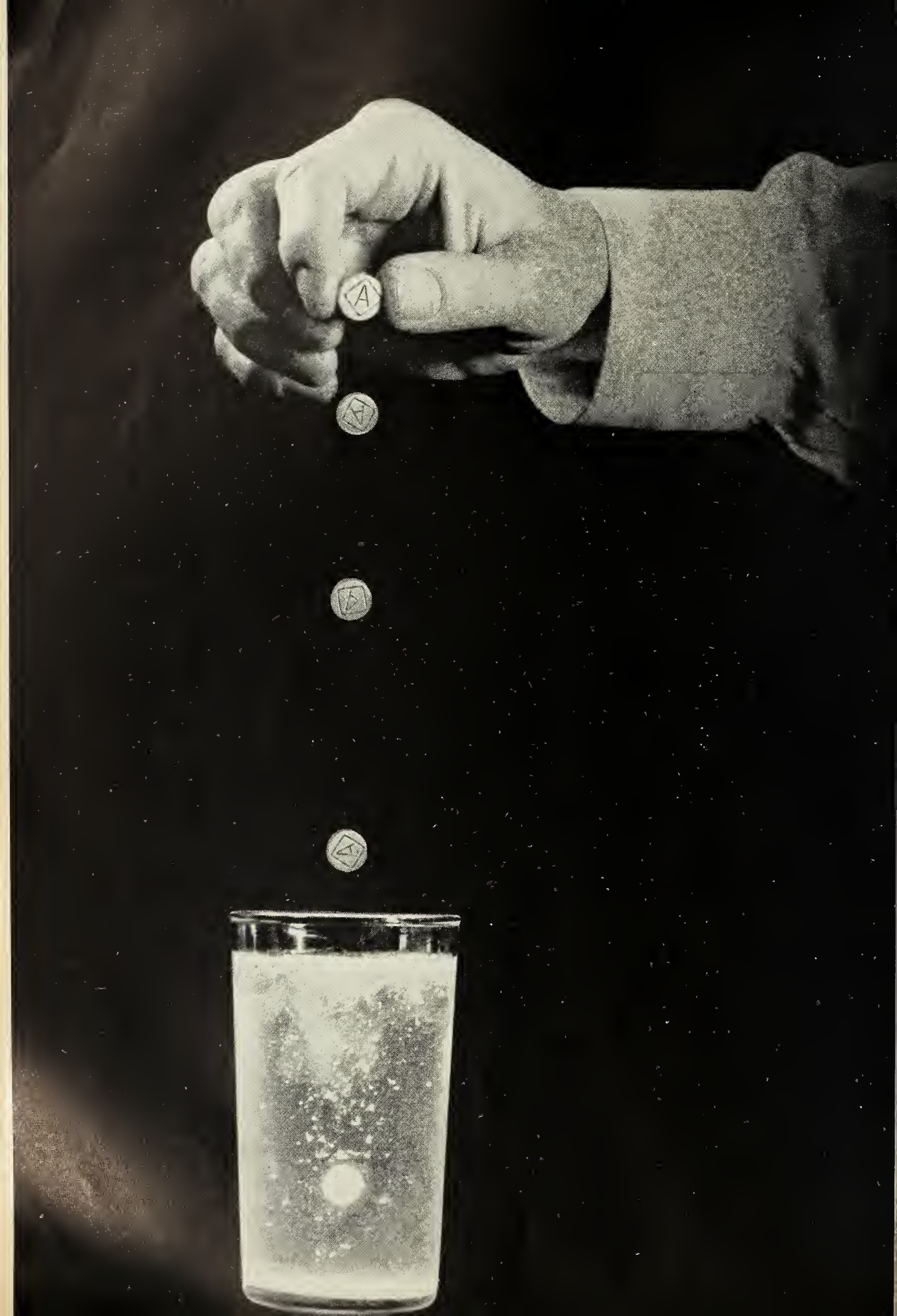
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Because of the swift absorption, your patient gets high blood levels of ERYTHROCIN (Erythromycin Stearate, Abbott) in *less than 2 hours*—instead of 4-6 hours as before. Peak concentration is reached within 4 hours, with significant concentrations lasting for 8 hours.

NEW

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It's easy on them. Compared with most other widely-used antibiotics, *Filmtab* ERYTHROCIN is *less likely to alter normal intestinal flora.* Prescribe *Filmtab* ERYTHROCIN for all susceptible coccic infections—especially when the organism is resistant to other antibiotics. Bottles of 25 and 100 (100 and 200 mg.).

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Actions of House of Delegates

(Continued from Page 842)

unscientific method of determination of service-connected disabilities, and that we respectfully request that copies of these resolutions be transmitted to the Congress of the United States and other appropriate federal agencies."

In connection with veterans' medical care, the House also adopted recommendations by the Reference Committee on Insurance and Medical Service which reaffirmed the policy on non-service-connected disabilities, established at the 1953 annual meeting, and which commended the informational program carried out since then by the Committee on Federal Medical Services of the Council on Medical Service.

Foreign Medical Graduates.—Three resolutions and a Board of Trustees supplementary report were submitted to the House regarding the evaluation of foreign medical school graduates, a subject which attracted major interest earlier this year at the annual Congress on Medical Education and Licensure in Chicago. The Reference Committee on Medical Education and Hospitals spent much of its time listening to the ideas and proposals of various state medical societies, state licensing boards, members of the Council on Medical Education and Hospitals and others. The reference committee recommended that "the intent and aims of this Supplementary Report and the three resolutions can best be met by referring the entire problem to the Council on Medical Education and Hospitals for further study. It is recommended that the Council report at the Interim Session in 1954 regarding the progress relative to this study." The House adopted the reference committee's recommendations.

Seal of Acceptance.—The Council on Medical Service presented a supplementary report, outlining the difficulties encountered in conducting the Seal of Acceptance program, and recommending discontinuance of the Seal of Acceptance for voluntary health insurance plans. The report said that the standards and principles of the program will be maintained as guides and recommendations for all groups operating or establishing plans. The House, on recommendation of the Reference Committee on Insurance and Medical Service, adopted the Council report, thus terminating the Seal of Acceptance program for voluntary health insurance plans.

Registration of Hospitals.—The House also approved a Board of Trustees report calling for discontinuation of the registration of hospitals by the Council on Medical Education and Hospitals and suggesting that the Joint Commission on the Accreditation of Hospitals be requested to undertake the registration of hospitals in addition to its present accreditation activities.

Miscellaneous.—Among a wide variety of other actions, the House also:

Voted to continue the holding of the annual Clinical Meetings;

Approved the establishment of a program of medical military scholarships with appropriate safeguards limiting the number of students involved;

Approved the extension, on a voluntary basis, of the Medical Education for National Defense program which currently is in operation in five medical schools as a pilot study, and

Authorized the Council on Scientific Assembly to conduct a thorough study of the use of tape recordings of the material presented at meetings of the Council, and asked for a report at the December meeting.

Opening Session.—Highlights of the opening House session on Monday were selection of Dr. Babcock as recipient of the Distinguished Service Award and the addresses by Dr. Edward J. McCormick of Toledo, then president of the Association, and Dr. Martin, then president-elect.

Dr. McCormick called upon the medical profession to take the guess work out of medical costs by adopting average fee schedules on an area or regional basis. The Reference Committee on Reports of Officers later suggested that the Board of Trustees make a study of such programs where they already are in operation, and the House approved.

Dr. Martin, in his opening session address, declared that the most urgent problem before the medical profession is that of financing hospital services to make them more generally accessible. In his presidential inaugural address, Dr. Martin said that physicians are duty-bound to keep themselves informed on public matters affecting the medical welfare of the people, and he also urged doctors to "reach back farther than the disease" in treating their patients.

Special Citations.—Two special citations were presented by the Association during the San Francisco meeting. During the presidential inauguration ceremony Dr. McCormick presented an award to a fellow Toledoan, Dr. Nicholas P. Dallis, for his outstanding health educational service as the writing member of the team that produces the illustrated feature, "Rex Morgan, M.D." At the closing House session on Thursday, Dr. Martin presented a special citation to Smith, Kline & French Laboratories of Philadelphia for "pioneering use of television in bettering the health of the nation." The plaque was accepted for the company by Mr. Francis Boyer, president.

The closing session also brought the announcement that the California Medical Association had presented a check for $100,000 to the American Medical Education Foundation.

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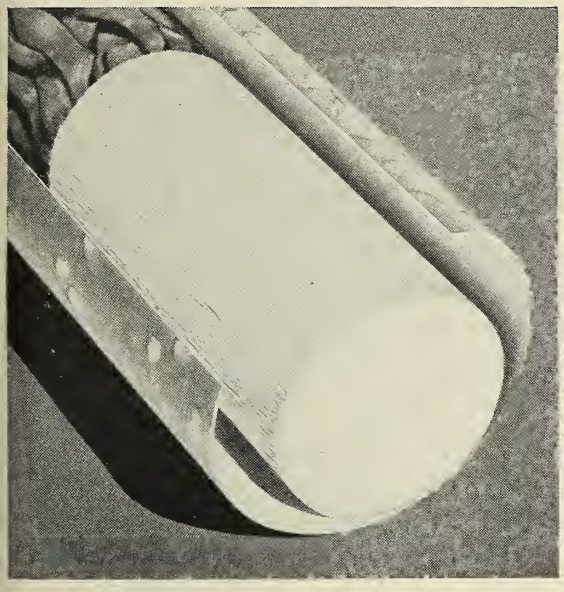
DOCTOR, WHEN YOUR PATIENTS ASK...

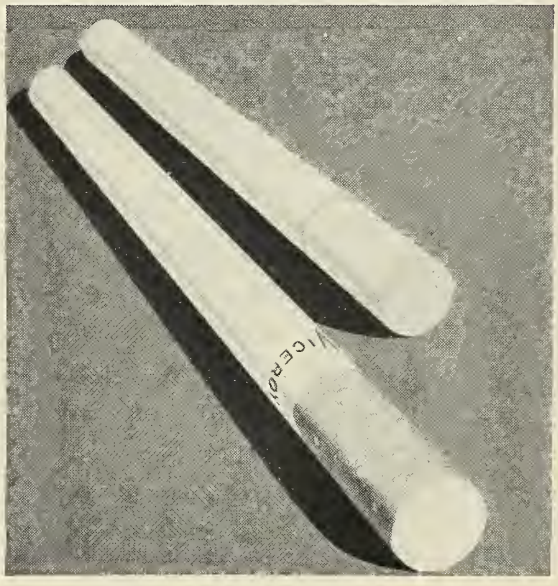


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The smoke is also filtered through Viceroy's extra length of rich, costly tobaccos. Thus Viceroy actually gives smokers *double the filtering action* . . . to double the pleasure and contentment of *tobacco at its best!*



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THAN CIGARETTES WITHOUT FILTERS

New King-Size
Filter Tip VICEROY

OUTSELLS ALL OTHER FILTER TIP CIGARETTES COMBINED



Actions of House of Delegates

(Continued from Page 846)

Election of Officers.—The election at the closing session brought the following results, in addition to the selection of Dr. Hess as president-elect:

Dr. Clark Bailey of Harlan, Ky., was named vice president.

Dr. David B. Allman of Atlantic City and Dr. F. J. L. Blasingame of Wharton, Texas, were re-elected to their positions on the Board of Trustees.

Also re-elected were Dr. George F. Lull of Chicago, secretary; Dr. J. J. Moore of Chicago, treasurer; Dr. James R. Reuling of Bayside, N. Y., speaker of the House of Delegates, and Dr. Vincent Askey of Los Angeles, vice speaker.

Dr. J. Morrison Hutcheson of Richmond, Va., was named by Dr. Martin as a member of the Judicial Council to succeed Dr. Edward R. Cunniffe of New York, who served as Council chairman for many years. Dr. Homer Pearson of Miami, Fla., was elected new chairman.

Dr. W. Andrew Bunten of Cheyenne, Wyo., was elected a new member of the Council on Medical Education and Hospitals, succeeding Dr. W. L. Pressly of Due West, S. C. Dr. Charles T. Stone, Sr., of Galveston, Texas, was re-elected to the same Council. Both terms run to 1959.

Dr. Floyd S. Winslow of Rochester, N. Y., was re-elected to the Council on Constitution and By-Laws for a term ending in 1959.

Dr. Joseph D. McCarthy of Omaha, Neb., was re-elected to the Council on Medical Service for another term running to 1959. To fill the vacancy created on the same Council by Dr. Hess' resignation following his election as president-elect, Dr. Robert L. Novy of Detroit, Mich., was selected.

The House of Delegates also chose New York City as the place for the 1957 annual meeting, San Francisco, for 1958 and Atlantic City for 1959. Previously selected were Atlantic City for 1955 and Chicago for 1956. The dates of next year's meeting in Atlantic City are June 6-10.

(Signed) GEORGE F. LULL, M.D.
Secretary-General Manager
American Medical Association

Michigan Attendance at AMA Annual Session

The following doctors from Michigan were registered at the June Session of the AMA at San Francisco:

Wm. Bromme, Detroit; M. B. Campbell, Detroit; W. C. Cole, Detroit; Carleton Dean, Detroit; Carleton R. Dean, E. Lansing; J. Lewis Dill, Detroit; Edward Dowdle, Detroit; Dwight C. Ensign, Detroit; R. Lamar Fitts, Grand Rapids; Mary M. Frazer, Detroit; L. James Hallen, Lake Huron; John M. Hammer, Kalamazoo; Frank W. Hartmann, Detroit; Wilfrid Haughey, Battle Creek; L. E. Henrick, Detroit; Harry E. Howard, San Rafael; Wilkie L. Howard, Northville; Wm. A. Hudson, Detroit; Leroy W. Hull, Detroit; Wm. H. Hyland, Grand Rapids; O. J. Johnson, Bay City; Ralph A. Johnson, Detroit; Jacob M. Kaufman, Detroit; Donald H. Kaump, Detroit; John L. Langin, Detroit; M. L. Lichter, Detroit; James Lightbody, Detroit; Ezra Lipkin, Detroit; Wm. L. Lowrie, Detroit; Sydney N. Lyttle, Flint; C. T. Mallery, Jr., Ann Arbor; Martin D. Verhage, Kalamazoo; J. Duane Miller, Grand Rapids; Wm. A. Murray, Detroit; Clarence I. Owen, Detroit; Carl S. Rattigan, Dearborn; John W. Rebuck, Detroit; W. E. Redfern, Detroit ;Charles H. Ross, Ann Arbor; D. J. Sandweiss, Detroit; E. M. Shafarman, Detroit; G. W. Slagle, Battle Creek; Wm. W. Stevenson, Flint; Geo. C. Thosteson, Detroit; Joseph P. Webb, Kalamazoo; James G. Wolter, Detroit; Meussa H. Worth, Ann Arbor.

Oscar Bigman, Detroit; Arthur C. Curtis, Ann Arbor; Wm. G. Gamble, Jr., Bay City; A. Ray Hufford, Grand Rapids; Reuben L. Kahn, Ann Arbor; Solomon G. Meyers, Detroit; Saul Rosenzweig, Detroit; Jacob Shapiro, Detroit; Walter S. Stinson, Bay City; John L. Yates, Livonia.

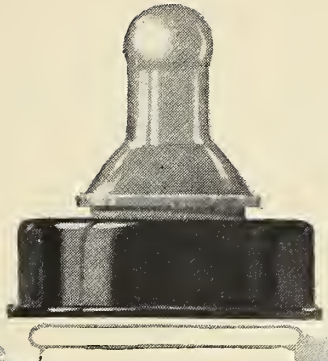
Geo. D. Albers, Grand Rapids; Warren W. Babcock, Detroit; R. H. Baker, Birmingham; Ralph Ernest Dawson, Flint; L. S. Fallis, Detroit; L. Fernald Foster, Bay City; K. E. McIntyre, Grosse Point; Paul E. Medema, Muskegon; William E. Nesbitt, Alpena; Alex Olen, Detroit; William G. Self, Detroit; Royce R. Shafter, Detroit; John W. Sigler, Detroit; Robert J. Sillery, Detroit; Wm. C. Strutz, Detroit; LeRoy J. Wallen, Sault Ste Marie; Bernard Weston, Whitcomb; John P. Yegge, Kent City.

Arnold O. Abraham, Hudson; M. J. Albert, Saginaw; Jos. M. Caputo, Dearborn; Milton D. Comfort, Flat Rock; Stanley A. Cosens, Bay City; Milton A. Darling, Detroit; D. C. Eisele, Ironwood; Stefan S. Fajans, Ann Arbor; Harld F. Falls, Ann Arbor; Edwin H. Fenton, C. T. Flotte, Ann Arbor; Harold Fulton, Detroit; Lambert J. Geerlin, Fremont; L. O. Geib, Detroit; Wm. J. Gelhaus, Monroe; Harold R. Gilbert, Wyandotte; Jacques P. Gray, Detroit; W. G. Greenlee, Detroit; Robert W. Heinle, Kalamazoo; B. I. Hirschowitz, Ann Arbor; D. C. Howe, Sault Ste. Marie; T. S. Huminski, Grosse Pointe; Marion W. Jocz, Grosse Pointe.

F. D. Johnston, Ann Arbor; Jack Kaupman, Detroit; Wheeler H. Kern, Garden City; Francis S. Kucmierz, Olympic; Helen E. Lanting, E. Lansing; James O. Lawrence, Kalamazoo; Traian Leucutia, Detroit; Toby Levitt, Battle Creek; E. F. Lewis, Jackson; Bruce C. Lockwood, Detroit; A. E. Ludwig, Port Huron; C. E. Maguire, Grosse Point; Percy W. Mason, Detroit; John G. Mateer, Detroit; Gordon B. Myers, Grosse Pointe Park; Robert L. Novy, Detroit; Benjamin R. Parker, Detroit; Grover C. Penberthy, Detroit; Edward A. Petoskey, Davenport; Geo. H. Phillips, Jackson; Jos. D. Picard, Dearborn; Ralph H. Pino, Detroit; H. M. Pollard, Ann Arbor; Robert J. Priest, Detroit; Lowell G. Redding, Dearborn; Jos. O. Revere, Mt. Clemens; Paul H. Ringer, Jr., Mt. Pleasant; Herbert F. Robb, Belleville; A. D. Ruedemann, Detroit; Elmer W. Schnoor, Grand Rapids; M. H. Seevers, Ann Arbor; Albert L. Steinbach, Detroit; Oscar D. Stryker, St. Clair Shores; Fetsuo Suglyama, Grand Rapids; Bela J. Szappanyos, Detroit; Raymond A. Tearnan, Munsing; Wadsworth Warren, Detroit, H. E. Woodford, Benton Harbor; Watson A. Young, Inkster.

Edmund T. Bott, Wayandotte; R. C. Buerki, Grosse Pointe; Everett W. Campbell, Detroit; L. A. Campbell, Saginaw; Ned I. Chalat, Detroit; Clare H. Clausen, Sault Ste. Marie; Hodge Crabtree, Ann Arbor; H. E. Cross, Grosse Pointe; A. J. Dalgleish, Watervliet; John S. DeTar, Milan; Harry M. Dickman, Hudson; Wilbur E. Dolfin, Ann Arbor; J. Colin Elliott,

(Continued on Page 934)



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What Would You Do?

Nine skits which extracted serious audience discussion by humorously presenting situations and problems faced by county medical society officers and their individual members—a surprise "hit" at the 1954 MSMS County Secretaries-Public Relations Conference—have attracted nationwide attention among medical societies as a new discussion technique.

The "dramatic stars" of the skits were secretaries of county medical societies. At the close of each playlet depicting a specific situation or problem, one of the actors turned to the audience and asked "What would you do?" The vigorous discussion of the audience was summarized on a blackboard situated on one side of the stage by L. F. Foster, M.D., MSMS Secretary.

The skits—each brief and generously embellished by ad lib remarks from the actors—covered a variety of topics. One raised the question of how long a county medical society secretary should serve. Picturing a nominating committee toiling over whether or not the secretary for the past 15 years should be "kicked upstairs" to the presidency and replaced by a younger man. Another pictured the mediation committee of an eight-man county society deliberating the reprimand of one of its erring members. The pros and cons of itemized statements and their value in public relations for the individual M.D., as well as the importance of the doctor's secretary and receptionist in individual public relations were covered in two other delightful skits.

Membership problems, indoctrination of new county medical society members, M.D. participation in civic affairs, and utilization of hospital and medical care insurance were the other topics dealt with.

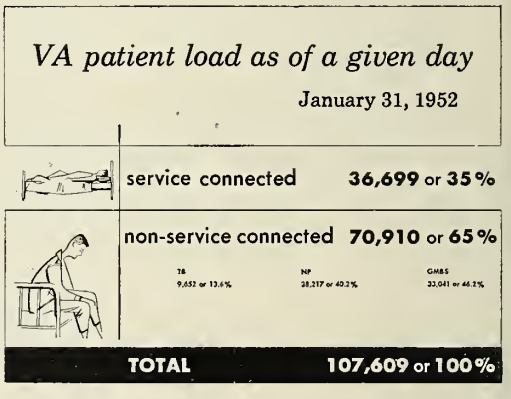
Perhaps the biggest laugh—and some of the most provocative discussion—came from the scene in which "Mr. Franco," speaking in explosive Italian dialect accompanied by violent gestures, demanded of "Dr. Richelieu" that he be sent to the hospital to rest his allegedly bad back because he had recently come under "Blue Crosses."

Guest interlocutor, who introduced each skit and expertly kept the ball rolling during the discussion periods, was Sam B. Shapiro, Chicago, who was billed as "a well-known producer and playwright" although his vocation since his grad uation from the University of Chicago has bee trade association management.

Numerous inquiries have come to MSMS head quarters as word has spread of a new easy-to-tak method of "buzzing" up discussion of practica problems. Writing and direction of the nine ski was headed up by Wm. J. Burns, MSMS Execu tive Director.

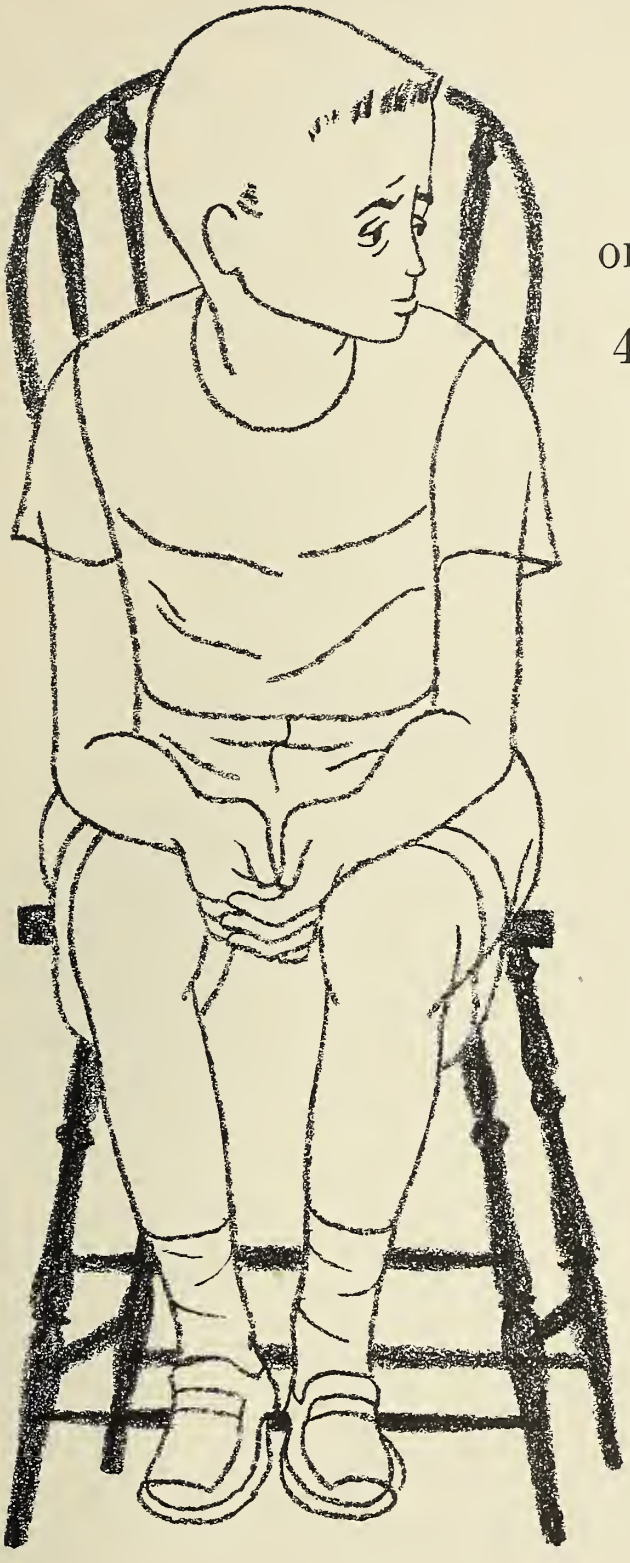
Thespians whose expressive action and dramati talent made the skits successful were: J. A. White M.D., Big Rapids; D. G. Pike, M.D., Travers City; J. W. Lyons, M.D., Marquette; L. Fernal Foster, M.D., Bay City, R. V. Bucklin, M.D Saginaw, E. W. Blanchard, M.D., Deckerville J. L. Isbister, M.D., Lansing; C. D. Selby, M.D Port Huron; Hugh W. Brenneman, Lansing; I Dell Henry, M.D., Ann Arbor; W. S. Jones, Jr M.D., Menominee; H. G. Benjamin, M.D., Gran Rapids; J. R. Doty, M.D., Lapeer; and R. H Baker, M.D., Pontiac.

In Viewing the VA Medical Program . . .



While the VA lists its patient load on a given day as 35% service-connected, only the long-range view of admissions and discharges over a year's time gives a truly accurate picture of the service-connected load (only 15.4%). This "discrepancy" appears because the VA's listing of 35% on a daily basis is not affected by the yearly turn-over of patients—the ratio of VA patients remaining to those treated and discharged (1 to 5.1). Over a period of a year 84.6% of VA patients are treated for disabilities incurred after—and having no relationship to—military service.

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Schaerrer, W. C., J. Missouri M. A., 37:287.

408152A

Editorial Opinion

IS THERE A DOCTOR IN THE RUBBLE?

Far be it from me to make any of our medical guests the least bit edgy, but I must report that this surely would be a fine time for the Russians to drop a big bomb on San Francisco.

There is a sort of perverse civic pride that has become evident since the advent of atomic warfare. No city wants to get bombed, of course. But still no major center wants to be left off the potential target list either.

If your home town is not on the target list, then obviously it cannot be much of a place. If the town is not a mail center, then maybe it turns out airplane propellers. If it does not make any of the sinews of war, well at least it stores a lot of beans. And after all, an army travels on its stomach. What I'm getting at is that no one is going to waste an A-bomb on Muddy Gap, Wyoming. Meaning no offense to any of the citizens of Muddy Gap.

Now San Franciscans, with a full sense of our own importance, are sure that we are No. 1 on Malenkov's revised list of American targets. This makes some of us a little sad but makes all of us not a little proud.

But if we are a prime target the year-round, we are many times more in danger today. We have the American Medical Association meeting here. Some 12,000 doctors are in town.

This is a lot of doctors. There are only 218,000 in the whole country. That means that better than one out of every twenty are now within the city limits.

This really makes San Francisco a juicy target for mass destruction. It takes seven years to turn out even a fledgling M.D.—and probably at least ten to get one who can afford to leave his practice for a week.

So one H-bomb over the St. Francis Hotel would destroy much more than 120,000 years of medical study. And we can whip up a steel mill in eighteen months.—Editorial by Abe Mellinkoff in the *San Francisco Chronicle,* June 23, 1954.

PR

PR is the abbreviation, in these days of using the short form to indicate almost everything, of the phrase "public relations." In its gaudiest manifestation it represents the yacht on which a sales representative entertains potential customers and writes off the cost of the whole operation as an item of doing business. In a milder variation it is the martini the bartender proffers you "on the house."

PR has certain other implications for the professional man.

It means professional reliability. The doctor who has accepted the responsibility for the medical care of the patient will be available for the house call when there is need for it. When he is away from his telephone he has made provision for a message service to relay the calls to him: and when he is out of town he has made prior arrangement with a fellow physician that the medical needs of his patient will be served. This stems from the cerebral cortex.

It also means personal responsibility for the patient. It implies, as has been suggested elsewhere, "the doing of all those things which encourage, and the avoidance of all those things which discourage, the affection and the esteem of the public." The seat of this is the heart.

These two, taken together, are the conscience of the physician.—William Bromme, *Detroit Medical News,* April 5, 1954.

DOCTORS HAVE RESPONSIBILITY

Over a long, misspent life I have had the usual assortment of concussions, contusions, aches, pains and agues, and am a very lucky fellow. All the doctors I ever had any professional truck with were dedicated croakers in the best Arrowsmith tradition, and if they made any mistakes they were honest mistakes.

But doctors are only men, and they are subject to the mistakes men make. I've known a couple who wound up as narcotic addicts. I've known a couple more who were hopeless, incompetent drunks, and others who didn't need to be drunk to be hopelessly incompetent.

Even though you know that medicine can be a racket, and that fee-splitting and undue expenses are not uncommon, the doctor generally has enjoyed an immunity from the penalties that beset other men. You can seldom sue him for a mistake.

If he's taking his fees in cash he can steal the Government blind taxwise, and get away with it. The late Elmer Irey of the Treasury sleuths once told me that there was more untraceable tax-dodging in the noble medical profession than in any other—and he used the word "racket"—that he knew of.

The medico always has been a sort of self-admitted god from the machine, and his ace in the hole has been an impregnable fraternal relationship with his associates that surpasseth the love of man for woman, or even money. It's a closed corporation, with the AMA sitting up on top of it. No matter how horribly a doctor butchers a case, from bum diagnosis to sloppy surgery to outright neglect, you can rarely force a fellow medico to testify against a member of the group.

A judge in Trenton not long ago tore the pants off the medical profession, mentioning in a quiet shout such things as "shocking unethical reluctance to accept its

(Continued on Page 861)



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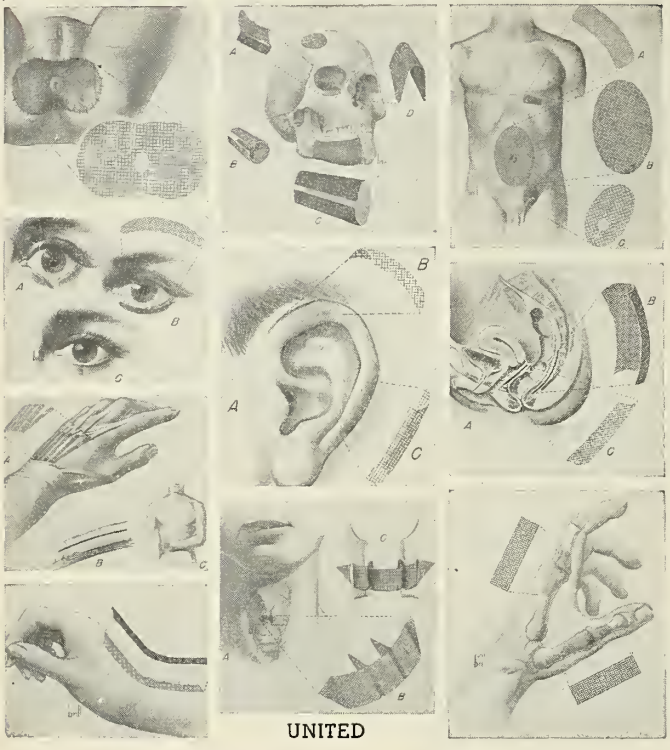
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LONG BEFORE HOT FLUSHES APPEAR . . .

Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 53 AUGUST, 1954 NUMBER 8

Obstetric Analgesia and Anesthesia

Current Problems

Charles S. Stevenson, M.D.
Detroit, Michigan

THROUGHOUT the ages, childbirth surely has been accompanied by some feelings of satisfaction and joy in the mother. Holding her newborn child she must have had some thought that the inconvenience and discomfort of the previous nine months, and the severe pain and hard work of her just completed labor, were a fair price to pay for such a God-given, wondrous reward. This parturient mother, bearing down strongly and fearfully during each pain in the second stage of labor, must have experienced some little sense of personal achievement in addition to her tremendous relief at the cessation of pain, when she heard the first cry of her newborn infant. Such a woman, being unattended by a physician, was subject to many dangers which modern medical science has now all but eliminated, but she and her infant were free of our modern pain relief practices, the dangers of which current statistics are revealing. It is a frank examination and consideration of these modern pain-relief practices which is the main purpose of this paper.

One hundred and one years ago Queen Victoria was delivered of her eighth child by the aid of chloroform administered intermittently over a period of fifty-three minutes by the famous John Snow. Analgesia was attained but there was no complete loss of consciousness at any time. Snow, in 1858, in writing of this "anesthésie a la reine," stated that it is the physician's object "to relieve the patient (as much as is possible) *without diminishing the strength of the uterine contractions.*" This delivery of England's famous queen with the aid of medical analgesia was a very newsworthy event, and word of it spread around the world. It marked the beginning of modern efforts at relieving pain in childbirth, and obstetricians, particularly in the last half century, have administered countless drugs and agents to parturient women for purposes of analgesia and anesthesia.

In Freiburg, in 1902, the joint use of morphine and scopolamine for the relief of pain in labor was introduced. The introduction of this method of analgesia was accompanied by a great deal of fanfare since it afforded *pain relief throughout labor* and not merely at the time of delivery. The fact that this method was named "twilight sleep" increased its public appeal. It was at once apparent, however, that the chief characteristic of scopolamine was its power to induce amnesia; the parturient woman felt pain during labor, but memory of it, and of labor itself, was subsequently fragmentary or absent altogether. This introduction of *amnesia* into the efforts of obstetricians to attain *analgesia* probably has had an over-all retarding influence upon healthy advances in the field of pain relief in parturition. Patients came *to demand* that they be put to sleep at the onset of labor and that they not be awakened until after the child was born. This tended to create the unhealthy impression among the laity that labor was an experience concerning which the mother should not be permitted to have any

Presented at the Michigan Clinical Institute in Detroit, March 10, 11 and 12, 1954.
From the Department of Obstetrics and Gynecology, Wayne University College of Medicine.

recollection, that it was neither good nor safe for women to experience the pain and other sensations of labor. One of the unwholesome effects of the use of scopolamine was that the parturient woman was no longer aware of the presence or absence of her obstetrician, and her subsequent memory was so vague that she could not know whether he had attended her during labor or had even delivered her at all. This quite naturally led to some completely understandable abuse of the employment of scopolamine by the overworked and under-slept obstetrician in that its use permitted him to remain asleep in his bed at home instead of being at the side of his patient in the hospital where he belonged. But what is the use of a physician at the bedside of his patient if she is mentally deranged, delirious, and is unknowingly tossing herself around her bed with such wild abandon that she must be either tied or caged in it lest she fall on the floor and injure herself? A strong-armed attendant is necessary to keep her from hurting herself, but the physician does not need to be there if the physician-patient relationship has been destroyed by scopolamine. Physicians, in this aspect of their search for pain relief in labor, seem to have forgotten the *dignity* of childbirth and the natural modesty of woman.

The relief of pain in labor presents special problems, chief among which is that there are two patients to consider, the mother and the baby. It is well established that the respiratory center of the fetus is especially vulnerable to sedative and anesthetic drugs, and since these agents regularly traverse the placenta, if given systemically, they can jeopardize the initiation of respiration at birth, as well as suppress subsequate pulmonary function of the infant. Furthermore, degrees of maternal anoxemia so slight as to be innocuous to the maternal organism are sometimes lethal to the fetus. The fetal blood, even under optimal conditions, has a low oxygen tension, which fact is most alarmingly presented when fatal anoxia of the fetus results from rather minor degrees of slightly prolonged maternal hypotension. This especial sensitivity of the fetus to the effects of almost all forms of maternal analgesia and anesthesia poses one of the most difficult problems in obstetrics. The obstetrician is caught on the horns of a dilemma, since he has to continually make a compromise between his commendable efforts at providing pain relief for the parturient mother, on the one hand, and the danger of causing asphyxia and suppression of the vital centers of the fetus, on the other.

The well-meaning obstetrician, in his understandable zeal for providing pain relief for the laboring mother, may do so at a small but alarming and unwarranted cost of maternal and infant life, or of compromised future infant health. Since successful labor and delivery for mother and infant will occur in almost every case *without maternal medication of any kind,* there is no actual necessity for complete, or nearly complete, analgesia or anesthesia for the mother. Since neither analgesia nor anesthesia are absolutely necessary to successful and safe parturition, death of either mother or infant because of them is nearly always an unnecessary and preventable death. Such deaths cannot be defended on the grounds that the use of the lethal drugs was necessary; in fact such deaths, except in the rarest of circumstances, cannot be defended at all.

Since the maternal mortality figure in a good many states in this country is now down to 0.06 per cent, and anesthesia in those states is the fifth or sixth most common cause of maternal mortality, this whole question of anesthesia of the parturient woman must become a cynosure of the attention of all those physicians who are sincerely interested in lowering our maternal mortality rates still further. Moreover, the number of infant deaths in the first month of life, throughout the country at large, is still between twenty and thirty per 1000 live births. Since half of these neonatal deaths are the result of abnormal pulmonary ventilation, from whatever cause, we must be wary of giving any amounts or types of drugs to the parturient mother which might have a deleterious effect upon the infant's respiratory center. We obstetricians are at a point in the development of our specialty where we must make an objective and penetrating examination of this whole question of heavily sedating and unnecessary anesthetizing our obstetric patients.

When the hazards to mother and infant inherent in the injudicious use of any analgesic or anesthetic agents are superimposed in the parturient woman upon the numerous hazards of the complications of labor there will be added danger for both mother and child. Complications of labor may result in injury to the very vulnerable fetal respiratory center, causing it to fall

short of a functional level adequate for the birth of uninjured offspring, and this same portion of the medulla is the site of action of the very agents used. Given a case in which there are several loops of umbilical cord tightly around the neck of the fetus, causing it to suffer some appreciable asphxyia—but it is just able to survive without any impairment—and add to this a heavy dosage of analgesic drugs, on top of which is added general anesthesia for delivery, and the infant probably will not survive, or, if it does it probably will be retarded or crippled, however slightly, in some way. There certainly are enough purely obstetric risks to the fetus inherent in parturition alone without adding to them any man-made fetal risks in addition, such risks being taken under the dubious license of the provision of complete, or nearly complete, pain relief for the mother.

The highest peak of mortality of humans during their entire life span occurs on the day of birth, and thus birth is closely associated with death. The escape of the infant from the intrauterine environment to the external world is the most hazardous experience of life, and the obstetrician should certainly do nothing which might increase this hazard. The study and prevention of the natural causes of fetal asphyxia and birth injury comprises one of the very foremost medical problems of today. The elimination of that portion of fetal asphyxia and birth injury which results from excessive and unnecessary use of analgesic and anesthetic agents, as well as the elimination of unnecessary instrumental and operative deliveries, would seem to constitute one of the most needed reforms in obstetric practice today.

The major conditions resulting in infant mortality in the first twenty-eight days of life are prematurity, asphyxia, anoxemia, birth injury, infection, and exposure to unfavorable environment immediately following birth. All of these directly dispose toward attentuation of the infant's respiratory function, and asphyxia is inseparably bound to anoxemia, prematurity, and birth injury. The exercise of postive efforts to prevent asphyxia of the fetus during parturition is one of the major responsibilities of the obstetrician, and this is particularly true when there is reason to expect the fetus to be premature.

Aside from the rarely serious or fatal nerve paralyses and skeletal traumata, intracranial hemorrhages are the most common injuries at birth and account for about one-fifth of all infant deaths occurring in the first three days of life. Fifty-seven per cent of neonatal deaths due to intracranial hemorrhage occur in infants that are premature, a majority of whom die on their first day of life.

The factor having the most profound influence upon cases of death from birth injury is method of delivery. Because of the frequency of intracranial hemorrhages in premature infants, the method by which they are delivered is one of the most important factors in determining whether or not the infants will survive. Since half of all neonatal deaths occur in premature infants, the properly safe management of premature labor and delivery, therefore, is one of the obstetrician's greatest responsibilities. Since the premature infant, during labor and delivery, has such a tenuous hold on life, it has long been taught that *nothing be done to narcotize or traumatize it.* It is contended here that this teaching should be applied not only to premature infants, but should be *extended to cover mature infants as well.* It does not seem reasonable that an infant which is expected to weight less than 2500 grams at birth should be spared narcotization and its dangers during labor and delivery, while an infant which will weigh more than this arbitrary figure can rightly be subjected to these dangers.

Respiratory depression in the newborn infant may be the result of anoxia, asphyxia, cerebral trauma, prematurity, or narcosis with analgesic and anesthetic agents. The asphyxia of the fetus which results from depression of the respiratory center by analgesic and anesthetic drugs administered during labor, plus that asphyxia which results from undue and prolonged compression of vital fetal parts during labor, all too frequently add up to *too much fetal asphyxia,* as our statistics regarding the high mortality from abnormal pulmonary ventilation in the newborn so clearly demonstrate.

It is well known that the fetus that has had some appreciable asphyxia during labor is more prone to suffer damage from the trauma of labor, and that the damage, because of the fetal asphyxia, will be more extensive. The asphyxia predisposes the infant's brain and liver to mechanical birth trauma, and it contributes both directly to fetal shock and indirectly to it through causing degeneration of vital viscera. The situation is a most vicious circle because the birth trauma to the infant's brain results in a further contribution to its asphyxia and shock. The shock, in addition,

contributes directly to further asphyxia, and also further compromises the infant's chances of survival by the development of focal lesions in the shocked viscera. The obstetrician, therefore, cannot afford to create asphyxia in the fetus with his drugs, nor can he create any damage in the infant by his manner or method of delivery.

Since analgesic and anesthetic drugs generally tend to decrease the effectiveness of the uterine expulsive mechanism, and thus to *increase the duration of labor,* the infant will suffer quantitatively more anoxia and asphyxia than in shorter and more efficient labors. We have reason to believe that there is some transient, mild degree of fetal asphyxia during every uterine contraction after a woman's labor really becomes active, and if she has a total of four hours of active labor instead of twenty-four hours, the fetus probably experiences only one-sixth as much asphyxia, quantitatively speaking, in the shorter labor. The most common cause of uterine inertia in modern obstetric practice, according to Eastman, is the injudicious administration of analgesic and anesthetic drugs, and they thus not only cause fetal asphyxia by a direct action upon its respiratory center but also through the prolongation, and sometimes even the stoppage, of labor.

What is the answer to this problem? Must we give no analgesia nor anesthesia at all? Must we follow the dictates and method of Read and achieve what has been called "waking hypnosis" in our patients? No, I don't believe we need to go to these extremes. There is a "middle ground" which is safe for both mother and infant, and I have used it with real satisfaction, both to my patients and myself, in private practice since the fall of 1941.

I believe that analgesia and anesthesia should be started, *in the form of a strong physician-patient relationship,* at the first office visit of the patient. At each subsequent office visit during the prenatal period she should be examined on the examining table and have her blood pressure taken *by her physician.* The uterus should be carefully palpated at each visit, and, after the twenty-fourth week of pregnancy the fetal position should be determined and described to the patient, and its heart rate reported to her. A minimum of ten minutes should be spent talking with the patient, at each prenatal visit, inquiring as to what questions she might like to ask and running through a short list of common symptoms and complaints with her to see if she has any of them. In this way the patient gets to know her doctor, *the doctor who will be with her during her labor and who will deliver her.* This physician-patient liaison helps to dispel her fears and she comes to share her physician's confidence. She is told that her labor will be an extremely painful experience, but that for every thirty to forty second period of pain she will have a two- to three-minute period without pain in which she can recoup her strength and determination. She is told that there is no reason to fear the pain, since it does not mean danger but rather a speedy termination of her labor by delivery of her baby. Thus she is encouraged to believe that while the pain is a most undesirable and hard trial of her stamina and courage, it is the necessary means to termination of her pregnancy and putting her baby into her arms where she can cuddle it.

As far as pain relief is concerned, the patient is told that she will be given some small injections of a drug *insofar as the safety of her infant will permit,* and that these injections will help to take some of the edge off her pains but at the most she cannot expect more than a partial relief. She is told that blockage of her perineal nerves will be done about thirty to forty-five minutes before her baby is delivered, and that she will be expected to bear down and work very hard during the last thirty to sixty minutes of her labor in order to deliver her baby herself. It is explained that a generous incision will be made in her perineum in order to let the baby's head pass from the vagina without damage either to the head or her perineum. She is told that her help and co-operation with the actual delivery are greatly needed, and that hearing her infant's first cry and seeing it as soon as it is born will have to suffice as her reward.

The actual details of analgesia which have served the author well are the administration of 1½ grains of Seconal as soon as the patient is in definite labor, and when really active labor commences, provided the cervix is 4 centimeters or more dilated, from 50 to 75 mgm. of Demerol are given intramuscularly. Within three to four hours the dose of Demerol may be repeated if the labor is still strong and it does not appear that delivery will occur within two hours. The average patient, in my hands, receives from 100 to 150 mgms. of Demerol during her labor. Pudendal nerve block is performed at an estimated twenty to thirty min-

utes prior to delivery in multiparae and thirty to forty-five minutes in primigravidae. A 22-gauge needle, 12 centimeters in length, is used to deposit 6 to 8 cc. of 1 per cent Xylocaine just inside the opening of Alcock's canal on each side, after the manner so clearly set forth recently by Klink,[1] of Temple University. This provides a saddle type of anesthesia of the vulva and perineum similar to that obtained with "saddle-block" spinal anesthesia, but carries with it none of the dangers of that spinal method.

The patient remains in active labor, and is better able to "bear down" hard with her late second stage pains because the anesthetization of her perineum makes it possible for her to do so without increasing her pain. When the perineum has thinned out and crowned adequately, a wide and deep mediolateral episiotomy is made, and the infant's head is delivered by Ritgen's maneuver with her next contraction. The episiotomy is closed in layers according to the accepted principles of operative surgical technique.

This general plan can be followed in almost all cases, but occasionally must be abandoned in the face of extenuating circumstances. No two patients are alike, and it is a mistake to try to fit all patients into one mold.

The benefits of this method are: no maternal deaths from anesthesia, a 30 to 50 per cent decrease in neonatal mortality from that of the national average, an incidence of spontaneous delivery of about 92 per cent, of forceps delivery (all low) of 5 per cent, with about a 3 per cent incidence of section. Rarely does an infant ever need any resuscitation, and then only from obstetric causes beyond the control of the physician. The average duration of labor in primiparae has been about six hours, and in multiparae about four and one-half hours. Half a cubic centimeter of Pitocin is injected into the deltoid muscle on one side when the head has been delivered, and one cubic centimeter of Ergotrate is injected into the other deltoid muscle when the placenta has been delivered. Postpartum hemorrhage is extremely rare, as is likewise retention of the placenta.

Some physicians contend that they would not want the mother to be awake if "things go wrong" with her or the infant. The "things" that go wrong are usually the very man-made troubles which this method all but eliminates, namely, vaginal and cervical tears caused by the obstetric forceps, injuries to the infant's head caused by forceps, or intracranial injuries resulting from pulling on the infant's head with forceps while using it as a dilating instrument to over-dilate the vaginal orifice before making the episiotomy, so as to be able to make a median rather than a mediolateral incision in the perineum. If some unavoidable difficulty with the infant does occur, the mother can always be given 15 milligrams of Demerol intravenously, this amount being injected slowly over a period of not less than one minute; then 75 milligrams of this drug can be given intramuscularly. This will give her an immediate, marked sedation, and it can be reinforced with barbiturates if necessary.

If the physician will give fifteen minutes of his time to each obstetric patient at each prenatal visit there will be no need whatever for him to resort to overly heavy dosage with analgesic drugs nor to employ unnecessary means of anesthesia during labor and delivery. He will thus make parturition less hazardous to the mother and her infant, and less worrisome to himself.

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DOCTORS HAVE RESPONSIBILITY

(Continued from Page 852)

obligations to society . . . when a doctor is accused of malpractice," and a lot of other bitter wordage.

The judge, Alfred C. Clapp of the Appelate Division of the Superior Court, was referring to a suit for malpractice which had been postponed 11 times since 1950.

And when expert medical witness for the plaintiffs finally decided, "on second thought," not to testify against a brother practitioner, the suit was dismissed again until Judge Clapp repealed the dismissal.

Time's about come where we recognize that doctors are just as liable to mistakes as writers who make libelous statements, architects who build faulty bridges, and grocers who sell ptomaine poison in lieu of food.

The docs—and I love mine—are in a business like anybody else, since they charge money for what they do or don't do in your behalf.

Within reason, it's time they became a little more liable for their actions, up to and including honest testimony in a court of law when one of the brotherhood gets nabbed off base.—Robert C. Ruark, syndicated column, *The Detroit Free Press.*

Calcium Therapy for Neuromuscular Irritability in Pregnancy

By Theodore S. Fandrich, M.D., F.A.C.S.
Detroit, Michigan

THE PROBLEM of providing adequate ionic calcium during pregnancy as a therapeutic measure against muscular tetany, due to pathological serum calcium levels, has gained renewed interest as a result of recent findings by Page and Page.[6] Many investigators have reported their observations of this tetanoid-type ailment for which numerous pharmaceutical preparations have been prescribed with equivocal results.

The etiology of neuromuscular irritability in pregnancy was suggested by Mendenhall and Drake,[3] who, in a series of 316 patients complaining of "neuralgia," "neuritis," "rheumatism," "numbness" or "tingling," effectively relieved these patients of this tetanoid-type ailment by the administration of calcium and vitamin D. Kehrer's[3] observation that 75 per cent of pregnant women exhibit an increased neuromuscular irritability attributable to insufficient calcium, pointed to a possible therapeutic approach based on increasing calcium absorption from the intestinal tract. Hartley[1] suggested that the symptoms of aching or cramp-like pains in the extremities have their pathogenesis in a disturbance of calcium metabolism, resulting in a tetanoid state. He reports amelioration of these symptoms by measures tending to improve the calcium metabolism.

It was, therefore, concluded that the administration of calcium salts to supplement the dietary intake was essential to insure normal calcium metabolism and maintain an adequate supply in the maternal pool.

Recently, Page and Page, as a result of a ten-year clinical observation, noted that the administration of dicalcium phosphate, conventionally used as a source of calcium, contributed to inducing leg cramps in pregnant patients. One of these investigators[5] is of the opinion that a preferential absorption of phosphates from the intestinal tract accounts for the prevalence of these tetanoid-type complaints. Due to the inverse ratio existing between the calcium and phosphate ions, excess amounts of phosphate, either from a dietary source or supplied as medication, will have a depressing effect upon serum calcium.

Newman[4] confirmed the fact that the administration of dicalcium phosphate lowers the blood calcium in pregnancy, indicating that this salt is not the ideal form for the administration of calcium.

By administering a calcium salt, free of phosphorus, with vitamin D to a series of patients who complained of leg cramps, Page and Page observed a marked clinical improvement. In a similar series, to compensate for the preferential absorption of phosphate, these investigators evaluated the use of aluminum hydroxide for the removal of some phosphate ions from the gastrointestinal tract, to permit a greater absorption of calcium. Serological studies conducted on this series demonstrated the efficacy of the aluminum salt in increasing both the total and ionic calcium.

Recently, a prenatal supplement has been made available* which employs calcium lactate, a calcium salt which is phosphorus-free. Also included is aluminum hydroxide (to precipitate some of the dietary phosphorus) plus all of the vitamin and mineral constituents recommended for pregnant and lactating women by the National Research Council, Committee on Therapeutic Nutrition of the Food and Nutrition Board. The tablets are small, easy to swallow and palatable, which aids in patients' acceptance.

This preliminary report is based on the clinical observations by the author on ten pregnant patients complaining of tetanoid-type ailments. These patients volunteered the complaint of tetanoid symptoms and were not approached with an inquiry regarding the evidence of such symptoms. It is very probable that the incidence of neuromuscular irritability is much higher than we have previously assumed, since pregnant patients invariably consider these symptoms a "normal" condition of pregnancy and inform the physician only when the cramps are severe. Case histories of these patients are reported herewith.

*Calcisalin Tablets supplied by The Horrower laboratory, Inc.

TABLE I.

Case History	*Treatment and Results*
V. D., thirty-five years of age, in second trimester of pregnancy—Severe muscular tetany reported in hands and legs. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Relief observed after five days. Now stretches legs without pain. Cramps returned when patient stopped taking medication.
I. C., thirty-seven years of age, in first trimester of pregnancy —Very severe leg cramps reported. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Tetanoid symptoms disappeared after three to four days.
Y. B., twenty-three years of age, in third trimester of pregnancy—Complained of leg cramps. Initial prenatal medication unknown.	Two Calcisalin Tablets t.i.d. Cramps ceased three days after therapy.
L. O., twenty-five years of age, in third trimester of pregnancy—Complained of leg cramps. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. 75 per cent improvement within one week. Cramps returned after patient discontinued medication.
K. K., twenty-six years of age, in second trimester of pregnancy—Quite severe leg cramps. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Cramps ceased after starting medication. Cramps recurred in two days after medication was discontinued.
C. L.,—Reported that cramps in hands awakened her in middle of night. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Cramps ceased after three days of medication.
D. W., twenty-five years of age, in second trimester of pregnancy—Mild occasional cramps. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Less muscular tension even on second day. More energy. Finger nails growing for first time in life.
R. W., thirty years of age, in second trimester of pregnancy —Leg cramps were quite severe at night. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Symptoms disappeared within one week. Cramps returned after medication was discontinued.
H. S., twenty-eight years of age, in third trimester of pregnancy—Leg cramps were quite severe at night. Patient was on conventional prenatal supplement, containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Symptoms disappeared after one week of medication.
S. S., twenty-three years of age, in second trimester of pregnancy—Complained of annoying leg cramps. Patient was on conventional prenatal supplement containing dicalcium phosphate as a source of calcium.	Two Calcisalin Tablets t.i.d. Symptoms disappeared after five days of medication.

Discussion

It was interesting to observe that although all of the patients were placed on a prenatal supplement containing dicalcium phosphate as the source of calcium, the incidence of muscular tetany persisted. The tetanoid-type ailments disappeared in every case when the patient was placed on two tablets of Calcisalin three times daily. When the medication was discontinued, the symptoms of aching or cramp-like pains in the extremities recurred, and the patients could again be relieved when Calcisalin tablets were again administered.

My preliminary observations on a limited number of patients tend to substantiate the results observed by Newman and Page and Page and indicate that a greater absorption of calcium can be achieved by the preferential use of a phosphorus-free calcium salt and the concurrent administration of aluminum hydroxide.

Further studies are in progress to obtain a greater statistical evaluation of this new prenatal supplement. However, the indication of increased calcium absorption suggests the use of this preparation as a routine prenatal supplement to insure adequate calcium levels.

Summary

A new prenatal supplement, combining calcium lactate, a phosphorus-free calcium salt, with aluminum hydroxide gel, to precipitate phosphate ions from the gastrointestinal tract and containing all of the vitamin and mineral requirements recommended for pregnant and lactating women, was administered to ten pregnant patients who complained of neuromuscular irritability. Response was favorable in all cases, and the tetanoid-type cramps were relieved.

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(Continued on Page 894)

Patients are People

A Physician's Soliloquy

By Blair Holcomb, M.D.

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"There are men and classes of men who stand out above the common herd: the soldier, the sailor and the shepherd, not unfrequently; the artist rarely, rarelier still the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization."

SO SPOKE Robert Louis Stevenson sometime in the late eighteen hundreds. From a lifetime experience with physicians because of his tuberculosis, he was in a position to know. You who have enjoyed "Treasure Island," not once but many times as I have, will recall his intimate portrayal of Dr. Livesey, ship's physician. You will remember too, Billy Bones, the apoplectic buccaneer, who, after a substantial blood letting by Dr. Livesey, growled, "Doctors is all swabs."

You see, there were differences of opinion about us, even in those days.

From a relatively exalted position in the public eye fifty years ago, we have come now to a place where we must explain our actions and justify our position. We have permitted ourselves to be placed on the defensive, a tactical error. Fifty years ago a successful physician lived in a home second only to that of the town banker or lawyer. He drove a good span of horses and a fine carriage, albeit dusty in summer and mudcovered in winter. Nobody begrudged him his economic position and he did not feel the need to apologize for it. The expression "public relations" had not yet been put together, mediation committees had not been conceived and lobbying for organized medicine had not even entered the dream stage.

What does the public think and say about us and the practice of medicine?

We spend too little time with the patient.

We are too impersonal.

We are always in a hurry.

We use technical terms which they do not understand (medical jargon).

We do not get to know them as individuals.

We do not explain the whys and wherefores.

We do not make enough house calls.

The cost of medical care (x-rays and laboratory tests) is too high.

What does the patient expect of his physician?

He wants him to know the science of medicine and to keep abreast of the latest discoveries. In "A Message" from the Advisory Committee to the Auxiliary of the AMA this year Drs. Gundersen, Blasingame and Hamilton stated: "He wants miracle drugs, but he wants them administered with a thoughtful word. He wants miracle surgery but it should be accomplished with a tender hand."

He wants him to have a sympathetic understanding of his personal problems.

He wants him to be a "father confessor" and a good listener, but he does not wish to be treated as the subject of a scientific experiment.

There are varied and good reasons for the state of mind of the public. Suppose you join me in standing off at a little distance and contemplating the practice of medicine as we see it today.

Let's try to be objective and face the facts. We are trying to fill the shoes of the family doctor and attempting to be scientific at the same time. Present-day medical practice places tremendous demands upon the physician's capacity. The mass of technical information has overwhelmed the average practitioner. It is impossible to keep up to date on medical literature, to separate the wheat from the chaff, to evaluate or appraise the usefulness of various procedures or treatments.

Then, we are told that in our public relations we are impatient and arbitrary, that we are socially ingrown and do not participate in community endeavors. And, therefore, we have added to the other manifold duties of the physician, such as attendance at too many medical meetings the obligation to interpret the problems of the medical profession to the public. And, because there is so much of a technical nature in the preparation of a man for the practice of medicine, there just does not seem to be room left in the curriculum for forensics, political economy or public relations. More of this anon.

It is partly the fault of the profession and partly the fault of popular science writers that overemphasis has been put on the importance of laboratory data and that the study of the patient as a person has been put in a rôle of secondary importance. I do not need to remind you that it is a common experience today to have patients in

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the quest for diagnosis or help, to ask for a basal metabolism or to request the laboratory technician to do a blood sugar or cholesterol estimation. And the demand for sex or other hormones no longer surprises us. It is not enough to read our medical journals. We cannot neglect the current issues of *Time, Newsweek* or *Readers Digest*. Frequently these are better reading.

I suspect that the social planners who would foist political medicine on our profession are laboring under the delusion that the practice of medicine consists in large part of adding up laboratory data and arriving at a sum which is called diagnosis. Sometimes, I wonder if we are not proceeding in a manner to foster this delusion among the public.

Nothing I shall say here today should be construed to mean that I do not place a high value on laboratory data. My own field, metabolism, is about as technical as any. And, because it is technical, it is all the more important that I shall know my patient as a person. If I do not know him thus, the application of technical information may be relatively useless.

Let's consider the old family doctor. My father was one of them. To modern physicians he was in an enviable position. He lived in the community and knew his families intimately. He was well aware of the character, intelligence and temperament of his patient. He knew whether or not he came from a well-ordered household. He saw how the individual behaved under stress and strain. This knowledge was invaluable to him in diagnosis and in predicting the success or failure of treatment.

The successful family doctor had a quality that my grandmother called gumption, which today goes by the name of the intuitive sense. He had to have it and use it and when he used it wisely and well, it was one of his most valuable assets.

His position was somewhat analagous to that of the country school teacher who made the rounds as a boarder in the homes of her pupils. She knew why Mary Perkins had trouble with arithmetic. She did not need the help of a child psychologist. Then came larger school districts, school buses and the creation of Parent-Teacher associations. You know the rest of the story.

Today, like the modern school teacher, we sit in our offices or by the bedside of the patient in the hospital and wonder about his home, his worries and frustrations. Is it any wonder that we frequently overlook what might be the most important factor in the patient's problem?

Someone has said, "It is almost as important to know what kind of a person has a disease as it is to know what kind of a disease he has." "He comes of good stock." Where, outside of a cattle breeders meeting does one hear this expression today? Is he made of shoddy or virgin wool? The family doctor knew the constitution of his patient. He knew the family.

What has happened to our intuitive sense? We still have it, but in the bewildering complexity of modern medicine, I suspect that some of us tend to lose confidence in it, and depend too much on technical data which are not infallible.

Today, we are apt to refer glibly to the patient as a cardiac, an arthritic or a diabetic. What we should say is that this is a man who just happens to have diabetes. This is no mere quibbling over words. Actually, in a given person, character and temperament may prove to be more important in his life than his physical disability.

It is infinitely less fatiguing to the physician to prescribe a tonic, a vitamine or a sedative, if you please, than to unravel painfully and at length, the snarled skein of an individual's life story. And, by the same token, it is far easier to order another laboratory test than to devote another hour sorting out and placing in orderly arrangement the details of the clinical history. By permitting ourselves to fall into these habits, of dodging the laborious pick and shovel work of the practice of medicine, we postpone the day when we should get to know the patient as a person.

And, speaking of the patient as a person, let me read to you what Osler said in 1889: "In matters medical the ordinary citizen of today has not one whit more sense than the old Romans whom Lucian scourged for a credulity which made them fall easy victims to the quacks of the time such as the notorious Alexander whose exploits make one wish that his advent had been delayed some eighteen centuries. "Deal gently," he goes on, "with this deliciously credulous old human nature in which we work and restrain your indignation when you find that your pet parson has triturates of the 1000th potentiality in his waistcoat pocket, or you discover accidentally a case of Warner's Safe Cure in the bedroom of your best patient. Curious odd compounds are these fellow creatures at whose mercy you will be, full of fads and fancies, of whims and eccentricities."

What manner of man must be he who aspires to encompass the demands made upon the physician of today?

He must have an intellectual capacity of wide scope.

He should receive a broad-based cultural education.

He must like people.

He must keep himself in good physical condition.

He must know the science of medicine and be able to keep pace with the advances in medicine.

He must be flexible and resilient in his thinking and possess the quality of imperturbability, "such a measure of obtuseness," as Osler said in Aequanimitas, "as will enable you to meet the exigencies of practice with firmness and courage, without, at the same time hardening the human heart by which we live."

He must use his intuitive sense, but with discretion.

Is not the making of a man into a physician a colossal undertaking? The answer is unequivocally yes if we are to fulfill the great expectations of the public. That the medical faculties are more or less aware of the need for a cultural education for the student of medicine is clear from a study of medical school catalogues. I quote from that of our own school: "The premedical student is advised very strongly against taking any medical courses in his preparation for the study of medicine. Rather, he should devote his efforts to obtaining the best possible general cultural education and, in addition, a thorough training in the basic sciences of chemistry, physics and biology." Unfortunately the print is too fine to be impressive and the effect is emasculated by the last part of the sentence.

Of 138 term hours of university work for admission, sixty-five hours must be in required courses, all but nine of these pure science. The remaining seventy-three hours are available for electives, supposedly of a cultural flavor. Actually, this is what frequently happens. The student consults his advisor, a member of the science faculty, who, I suspect, has meager respect for the liberal arts school and who holds not a little awe for the science of medicine. It is not hard to understand why the student completes his university work with only a veneer of cultural education.

But, let's go back a bit further. In high school, the pre-medical student must have spent a minimum of one year in history. Two years of Latin are required, but this hurdle can be avoided by the wary student. In fact, in many high schools today, the study of Latin is discouraged. Besides, how many individuals by the third year in high school have decided on medical careers? Our medical schools obviously say nothing about grammar school education, but while we are about it, why not turn out the progressive education people with their courses in social orientation and make reading, writing and arithmetic necessary for admittance to high school?

In a scathing article, "Quackery in the Public Schools," *Atlantic Monthly,* March, 1950, Albert Lynd puts his finger on the reasons for the poor quality of education in our secondary and elementary schools; "Next to the minister, the high school principal of thirty years ago was the most learned fellow in town. Today you may find your local high school in charge of a brisk Kiwanian whose 'professional' training has been free of the elements of traditional culture. His teaching experience may have had nothing to do with letters or science; it may have been in auto driving or basketball or pattern making or 'guidance'; no matter in any case, because what counts in the advancement of his career is in the accumulation of courses in administration. He may even wear the splendid title of Doctor, earned through researches into the theory and functions of a school cafeteria. He may not be able to decipher the Latin date on the cornerstone of his own school building or to read a single word in any other foreign language, living or dead, or even to write a decently turned paragraph in English, but he can lead an enraptured class discussion in 'A Democratic Solution of Our Traffic Problem.'" Later on, "There is an indication of the attraction of this pseudo-scholarship for mental lightweights in the degree mania which pervades the field. Of all non-medical occupations this is the most thoroughly bedoctored. The yearning of pedagogues for this title exceeds that of corn-cutters, chiropractors, and camp-meeting theologians. It is facilitated by a fairly recent device called 'Doctor of Education,' which by a kind of academic Gresham's law is driving the older and more difficult Ph.D. out of this low-fenced intellectual arena. I know of one Ed.D so proud of his title that he risks night emergency calls by putting 'Dr.' in front of his name in the telephone book."

I have a strong conviction it is too late to start basic education during the Freshman year in college. I am so old-fashioned to believe that it should start in grammar school and that there is no substitute, in the words of Ajax Carlson, for "sheer drill and diligence."

A few medical voices are beginning to cry out in the wilderness in protest against education. One, Dr. E. V. Allen, internist at the Mayo Clinic in the leading article of the June 20, 1953, issue of the *J.A.M.A.*, "Medicine Today, It's Aims and Responsibilities," expresses our feelings clearly: "in pre-medical curriculums are courses used as eliminators. These courses screen out from among students who would seek admission to the medical school most of those who do not have extraordinary intellectual gifts as these are expressed in mastery of difficult fields of pure science that may have small relevancy to the work of a physician or to the qualities of mind or heart of which he should be possessed. I am told also that the scholar, trained to read accurately, to think consecutively and with infinite care will find little in a medical atmosphere that he can recognize as scholarship. He will applaud the amazing technical proficiency with which the physician's training endows him, but if he reads in the medical library, he will deplore the plethora of redundant material, the incoherence, the faulty sentence structure, the inexact quotations and the wretched arithmetic. The fault lies, I believe, not greatly with the physician himself. He cannot know that with which he has never been made acquainted. The fault can be identified, I believe, as one of the blind spots in the eyes of those who direct education, including pre-medical education, the failure thoroughly to ground young students in grammar, rhetoric, and composition, the essentials to competence in written or spoken expression. There grows from this deficiency an unhappy situation. A major part of the contact a physician can effect with his patients, the public, is by means of what he writes or says; yet, he was not taught, when he was preparing for the study of medicine to write, speak or refrain from writing or speaking."

I would like to emphasize that our dissatisfaction with the cultural education of our medical students is in no way peculiar to our own profession. The same complaints come from the leaders of the law, engineering and dental professions, and, even in such an abstract field as theology, we hear lamentations about the narrowness of outlook of the average divinity student.

How many physicians in the audience here today, given the opportunity to do the job all over again, would select a pre-medical course with a minimum of science subjects and a maximum of liberal arts courses? I strongly suspect that the majority would do just that.

What can the medical profession today do about the education of the physician? As citizens and as tax payers we can take a greater personal interest in the administration of our public schools, insisting on better quality of teaching personnel, higher compensation for teachers which would attract the right kind of people to the teaching profession. Teachers are born not made.

As clinical teachers in our medical schools and as practicing physicians we can continue to urge a much broader pre-medical cultural background. We can advise the committees on admission to use a more human yardstick in measuring up candidates for our medical schools.

To our medical students we should attempt to convey the fact in clear cut terms that medicine is as much an art as it is a science. They are so steeped in science, however, that they regard us with pained incredulity. There are certain techniques in the application of the art of medicine just as there are techniques in the science. Here are some simple principles that we attempt to instill in our students' minds:

Place yourself on the patient's level. Don't talk down to him. Take his history to the bedside. Sit down by the patient in making rounds. Five minutes spent thus are worth infinitely more to him than fifteen minutes in "grand rounds." Make yourself take an adequate history. Beware of the Jehovah complex.

Be frank, sincere, friendly, tolerant. Learn to make the truth pleasant to hear. I am talking about the bedside manner in the better sense of the word.

Learn to use your intuitive sense, but don't let it run away with you. Contrive somehow to cultivate a non-medical vocabulary. This is not as easy as it sounds.

Well, there you have it. Now perhaps you know why we do measure up to the stature of the man we are supposed to be.

(Continued on Page 889)

Diverticula of the Jejunum and Ileum

By Paul J. Connolly, M.D.

Detroit, Michigan

IN RECENT years, reports in the literature of cases of diverticulosis of the small bowel other than the duodenum reveal that this is not a rare lesion. The number of reported cases (approximately 400) is no indication of the frequency of its occurrence. The finding of four cases in thirteen months on our own surgical service prompted an investigation of the disease.

While reports in the general literature have been described by Fischer,[8] credit for the reporting of the first case in the English language has been given by King[17] to Astley Cooper in 1807[5] (Fig. 1). The first case in the literature of this continent was that of William Osler in 1881,[22] who described the necropsy findings of a man, aged sixty-five. He had for years "suffered much from loud rumbling noises in the belly, particularly after each meal. So loud were they, that it was his habit, shortly after eating, to go out to take a walk and keep away from people, as the noises could be heard at some distance." In addition, he had "been subject to colicky pains in the abdomen." The autopsy findings were typical of most cases of jejunal diverticulosis. "The jejunum presented fifty-three diverticula on the mesenteric border—all of hemispherical shape and attached by broad bases. They range in size from a cherry to a large apple.—They lay between the peritoneal surfaces of the mesentery and numerous blood vessels coursed over them."

Meckel,[20] in 1822, described the diverticulum which we know as the one associated with his name. He divided diverticula into true and false diverticula. The false he distinguished from the true "by its rounded form, by the absence of several superimposed tunics and finally by its occurring in any part, even in the stomach, but most frequently in the duodenum and by the existence of several at once." The true diverticulum has become confused with congenital, and false with acquired. For years following this, the literature regarding diverticula concerned itself largely with differentiating these four groups and with the etiology. Little attention was paid to diagnosis and treatment.

While there is not universal agreement as to the etiology, it has been long noted that each diverticulum appears to be associated with a mesenteric vessel. It has been thought that there is a weakened area at the entrance of the vessel into the bowel wall and that a mucous membrane hernia could develop here. Fraser,[9] agreeing with this as the origin of the diverticula, explained the frequency of their appearance in the jejunum as due to the jejunum being three times the size of the ileum, resulting in the longitudinal muscle coat being thinner and also to the individual arteries being larger in the jejunum. The lack of a peritoneal coat at the mesenteric border was also thought to make this a weaker area than the remaining circumference of the bowel. Hansemann, in 1899,[13] made serial sections through bowel with diverticula and showed that the sac made use of the vascular channel to bulge through the muscle. He thought that gas pressure was the causative force. Edwards[7] believes that di-

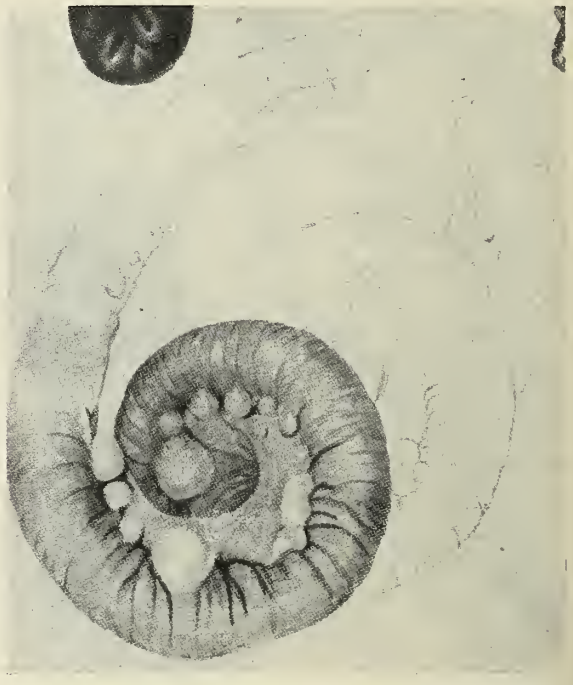


Fig. 1. The first drawing of a specimen from a case of diverticulosis of the jejunum, reproduced from Astley Cooper's *Anatomy and Surgical Treatment of Crural and Umbilical Hernia,* 1807.

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verticula start in a relaxed segment of small bowel between two segments in constriction by pushing a wedge of mucous membrane into the vascular gap. "If this part of the intestinal wall contracts, the wedge may be driven back, but there will come a time when the wedge driven out is of such size that the contraction of muscle about its base will consolidate its position by gripping it in the vascular gap." In time this will become permanent and pressure will tend to increase its size (Fig. 2).

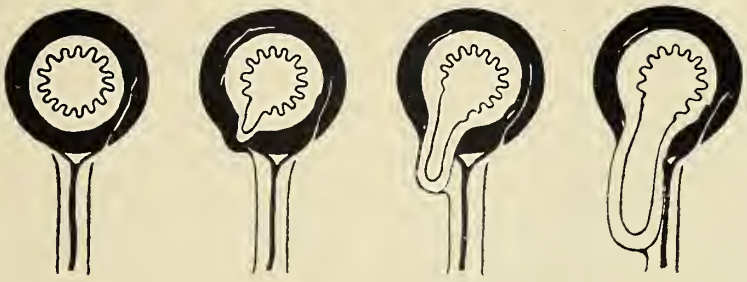


Fig. 2. Diagram illustrating formation of a diverticulum. Note the sites of vascular penetration, the absence of mucous membrane folds in the diverticulum, and its gradual incorporation in the mesentery.

Hansemann[13] produced diverticula by gas pressure, but Chlumsky, in 1899, dilated the gut of living dogs and found that it ruptured on the antimesenteric border.[13] Rosedale[26] using intraintestinal pressures up to 1.5 pounds of mercury in thirty-five fresh postmortem specimens of jejunum was unable to "produce any definite outpouchings." Fraser,[9] in postmortem gut, produced diverticula readily with bismuth solution or oxygen "but with equal distention in the jejunum, ileum and colon produced diverticula in the jejunum only."

King[17] doubts that blood vessels are a factor in etiology since some of the small diverticula have muscle, and if this were a mucous membrane hernia there should not be muscle in the walls of any of the diverticula.

While a solitary diverticulum of the jejunum or ileum may occur, multiple diverticula are seen, more often ranging up to as many as four or five hundred. The solitary type is more likely to be in the younger age group, to be of the congenital type and may be on the antimesenteric side of the bowel. This may be a partial reduplication of the bowel. Indeed, some of the solitary diverticula have been found to have two openings into the bowel, further supporting this idea.[2] While diverticula are reported as occurring regularly in mammalian embryos,[31] multiple diverticula are rare in children and usually are discovered in the older age group.

The multiple diverticula are on the mesenteric border separating the peritoneal leaves of the mesentery or bulging through one side of the mesentery. They often appear to be paired, one on each side of the bowel. Each diverticulum appears to have its opening at the entrance of a blood vessel. These vessels can be seen coursing over the surfaces of the diverticula. In size, the diverticula vary from a minute projection to a rounded sac, 10 cm. or more in diameter. The walls of the small diverticula approach that of the normal bowel in thickness, while that of the large diverticula is thinner and may approach paper thickness.

Microscopically, the wall consists of serosa, mucosa, and submucosa, with varying amounts of muscle. The mucous membrane is usually intestinal in type but may contain gastric or pancreatic tissue and all of the various tumors that are listed under complications.[2,3,14,17,30] The openings into the bowel are usually large and drain well, but they may be small or stenotic and obstructed by inflammatory changes, scar tissue or fecoliths. The walls may be of parchment thinness and be translucent or they may be thickened by fibrosis or edema of inflammation.

Gordinier and Sampson,[12] in 1906, first reported the discovery of these lesions in a living patient. They operated upon the patient because of intestinal obstruction and found multiple jejunal diverticulosis with a kink in the bowel about one of the diverticula. This diverticulum was removed and the kink rectified. The patient recovered.

In 1912, diverticula of the small bowel were first revealed through x-ray examination by Case.[5] In 6,847 complete gastrointestinal studies, he found four cases of multiple small bowel diverticula. Two of these findings were proven at operation. Rankin,[23] in 1934, reported the finding of diverticula of the small bowel other than duodenal and Meckel's only once in 25,000 cases. However, Ritvo,[25] using "routine examinations which comprised fluoroscopic studies and roentgen film of the esophagus, stomach, duodenum and upper jejunum at the time of ingestion of the opaque meal, subsequental observations after an interval of six hours, and in some instances a twenty-four hour study," found twenty-five cases in 4,786 gastrointestinal studies—an incidence of .5 per cent. Orr,[21] in 1949-50, approached this level, finding nine cases in 2,161 barium meals—an incidence of .42 per cent.

The earliest recorded cases were discovered at autopsy. Scattered cases were reported from the time of Cooper's in 1807.

Edwards, when special attention was given to the search of diverticula, almost doubled the number of cases found at autopsy. Rosedale and Lawrence reported in 1936 that by distending the bowel with air at the time of autopsy they were able to find diverticula in four out of 300 cases—an incidence of 1.3 per cent.

TABLE I. AUTOPSY FINDING OF DIVERTICULA OF THE JEJUNUM AND ILEUM

Investigator	Diverticula	Autopsies	% Positive Findings
Reinhart	3	5,000	.006
Brown and McHardy	16	8,000	.2
Edwards (first)	9	2,820	.3
Edwards (second)	5	881	.57
Rosedale and Lawrence	4	300	1.3

TABLE II. REPORTED COMPLICATIONS OF DIVERTICULOSIS OF JEJUNUM AND ILEUM

1. Inflammation or diverticulitis
2. Adhesions due to inflammation
3. Concretions in the sacs
4. Mesenteric thrombosis
5. Peritonitis
6. Hemorrhage
7. Perforation (spontaneous or traumatic) with peritonitis or with abscess formation
8. Volvulus
9. Obstruction by fecoliths
10. Construction of the lumen by scar tissue
11. Obstruction due to kinking by pull of a heavily filled diverticumum
12. Obstruction due to pressure of a heavily filled diverticulum
13. Obstruction due to edema
14. Parasites
15. Tumors
    - Lipoma
    - Fibroma
    - Aberrant pancreas
    - Carcinoid
    - Sarcoma
    - Carcinoma
16. Cyst formation due to closure of the neck of the sac
17. Sprue syndrome
18. Fistula formation
    - Enteroenterostomy
    - Enterocholedochostomy

The maxim of Kiefer[16] that "lesions of the small intestine are not found unless they are looked for" is illustrated by the increased incidence of these lesions found at autopsy and through x-ray by those interested in the subject. The same holds true for the clinician, but here the difficulties are greater because of the lack of a definite symptom complex and diagnostic signs. Indeed, many of the patients are symptomless, while others have associated lesions such as gallbladder disease, peptic ulcer, hiatus hernia or cardiac conditions which cause symptoms.

Most of the signs and symptoms are due to a disturbance of the physiological functions of the small bowel. Anorexia is the most common symptom and occurs in 50 per cent of cases. Other symptoms are crampy abdominal pain, bloating and fullness and abdominal noises occuring after meals and usually subsiding spontaneously. Hypermotility may cause diarrhea. Patients with these symptoms comprise one of the three groups of Orr and Russell,[21] i.e. patients with gaseous dyspepsia and mild abdominal discomfort. The second group consists of those with complications, and the diagnosis is usually made at the time of surgery. Shutkin, in 1945, with the help of previous x-rays showing diverticula of the jejunum, was able to make the first reported successful preoperative diagnosis of perforation of a jejunal diverticulum.

The third group consists of patients in whom the diverticula are an incidental finding. They may be found at the time of surgery for other things or during x-ray studies for other lesions.

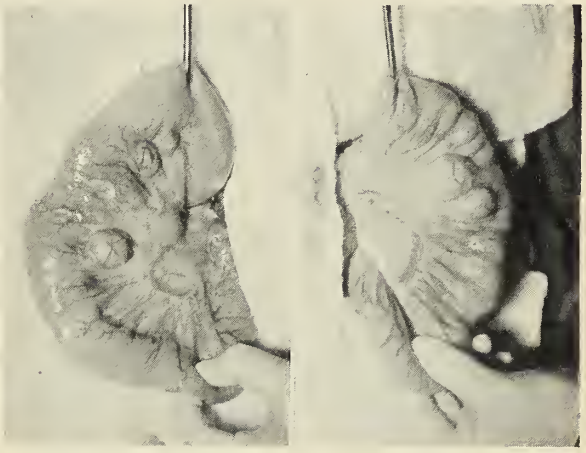
Baskin[2] has reported sixteen different illnesses (mainly associated with the gastrointestinal tract) in which jejunal diverticula were incidental findings. When small bowel diverticula are found by x-ray in a patient with gastrointestinal complaints, it is not always easy to determine the factor played by the diverticula in the patient's illness. Where other disease processes can be excluded, it seems feasible to attribute the symptoms to diverticula. Certainly, in our limited experience, this has been satisfactory, as the results of resection have been good. Baskin,[2] however, reported one case in which two diverticula were excised only to have the patient return one year later with the same complaints. In cases of this type, new diverticula must be ruled out, as well as diverticula overlooked at the first operations, since unless the bowel is distended they may be easily missed. Godard[10] operated upon a patient for acute intestinal obstruction, resecting 70 cm of jejunum containing twenty-five diverticula. Five years later, x-rays showed more diverticula, and 80 cm more of intestine containing twenty-six diverticula were removed from the site where five years previously none was evident.

Treatment

Medical treatment has usually been recommended for those cases without complications. It probably is the better treatment in patients with mild symptoms, in those with small diverticula, for those in whom the diverticula are an incidental finding by x-ray or operation and for those patients who are poor surgical risks. Medical treatment consists of:

1. Low residue diet.
2. Lying down after meals.
3. Avoidance of straining.
4. Alkalies and antacids.
5. Antispasmodics such as atropine and belladonna.

Surgical treatment consists of removal of the involved segment of bowel with restoration of continuity by end-to-end or side-to-side anastomosis. Occasionally, where a solitary diverticulum is present or where there is only one large diverticulum that is thought to be causing the trouble, although other smaller diverticula are present, it may be possible to remove the diverticulum without removing the entire circumference of the bowel. Short-circuiting the involved segment is not satisfactory, as was demonstrated by a case of Braithwaite's,[4] in which four feet of jejunum with diverticula was short-circuited. The patient did not obtain relief, however, until four months later when the involved area was resected. Surgery is indicated for most of the complications listed earlier in this paper. It is also indicated in those patients who are not controlled by medical treatment or who cannot or will not follow medical treatment and in whom the symptoms are severe enough to warrant laporotomy and resection. In addition, those with large diverticula, especially when they retain barium for long periods of time, should have the diverticula removed because of the danger of perforation of their thin-walled sacs.



Figs. 3 and 4. Right and left sides of jejunum as seen at the operating table showing multiple diverticula.

Case 1.—Mrs. A. W., aged forty-seven, a housewife, was admitted to the hospital August 6, 1951. For four years the patient had a rather constant pain in the left upper quadrant just beneath the costal margin. Pain was not related to ingestion of food. Intensity of pain would vary, and most relief was obtained by lying on the left side at bedtime. Physical examination was negative except for small fibroid tumors of the uterus. X-rays taken August 9, 1951, showed a diverticulum of the second portion of the duodenum. The patient was placed on an ulcer-type regimen without improvement. On August 30, 1951, the patient was operated upon and the diverticulum of the duodenum removed. In the jejunum near the ligament of Treitz were seven moderate-sized diverticula in the space of one foot of bowel. These were on the mesenteric border (Figs. 3 and 4). This segment of bowel

was removed and continuity restored by side-to-side anastomosis. Recovery was uneventful.

Recheck x-rays of small bowel on November 13, 1951, showed a slight barium residue in what was thought to be the blind end of the proximal segment at the anastomotic site.

The patient was last seen in June, 1953, for fibrocystic mastitis bilaterally. She had had no abdominal distress since her previous operation.



Fig. 5. Multiple diverticula of jejunum as shown by x-ray.

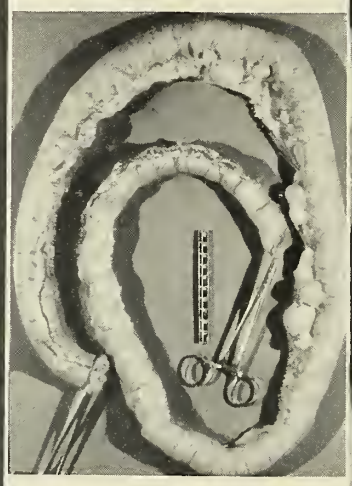


Fig. 6. Removed specimen demonstrating jejunal diverticula.



Fig. 7. Closer view of specimen showing the many diverticula.

Case 2.—Dr. G. C., aged sixty-six, a dentist, entered the hospital in October, of 1951, because of epigastric pain of six months' duration. This pain came on especially after eating greasy food. He also complained of substernal pressure, nausea without vomiting and bright red blood in the stools. X-rays taken April 10, 1951, showed diverticulosis of the sigmoid and terminal ileum. The patient gave a story of questionable jaundice of two weeks' duration. Icteric index was 5. X-rays of the gall bladder showed non-function. The electrocardiograph showed a coronary occlusion. After medical treatment for the coronary occlusion, the patient was discharged. He was readmitted in December, 1951, because of paraumbilical pain. At this time he said, he had had the pain intermittently for the last four years. On December 31, 1951, a cholecystectomy was performed. There were no stones, and the gall bladder showed chronic cholecystitis. Postoperatively, the patient had constant pain in the abdomen which became worse two hours after eating. He complained of nausea and anorexia and suffered a fifteen-pound weight loss. His gastrointestinal tract was x-rayed again in March 1952, and multiple large diverticula of the jejunum were found (Fig. 5). On March 27, 1952, Dr. L. B. Ashley removed 130 cm of jejunum, just distal to the ligament of Treitz, which contained numerous diverticula (Figs. 6 and 7). The patient went into shock and was in critical condition for three days, but following this made a rapid recovery. Five weeks later, he had gained six pounds and did not suffer from epigastric pain, although he still had some bright red blood in the stool which was attributed to diverticulosis of the colon.

He was hospitalized on several occasions after this with pulmonary emboli and congestive heart failure but had no further abdominal complaints.

Case 3.—Mr. R. W., aged sixty-four, a colored laborer, was first seen April 22, 1952, complaining of gas on his stomach since 1937. He had a sensation of unusual fullness soon after eating, with gas and abdominal distress accompanied by loud rumbling noises. He would occasionally vomit food, usually in the evening. There were no food intolerances. He had been on an ulcer-type diet and medications since 1937, without improvement. X-rays at this time showed a normal gall gladder and stomach, but in the jejunum was a large diverticulum which retained barium for several hours and a suggestion of several other diverticula (Fig. 8). On June 9, 1952, operation was performed. One large, thin-walled diverticulum 4 cm. in diameter was found about two feet from the ligament of Treitz and one very small diverticulum about a foot lower down. The larger diverticulum was removed and the bowel rejoined by end-to-end anastomosis. The patient had no further abdominal distress and was last seen in June, 1953.

Case 4.—Mr. A. S., aged sixty-one, a farmer, was seen on September 19, 1952, with the complaint of vague distress in the upper abdomen of several weeks' duration. For ten or eleven years he had suffered with pain in the left midabdomen. The pain was increased by standing or

bending, disappeared on lying down, was referred to the back and was not affected by food. In 1945, he had tarry stools and in May, 1952, he had been hospitalized because of massive gastrointestinal bleeding with tarry stools but no hematemesis. He had been seen in numerous medical centers, and many x-rays had been taken. These showed at various times irritation of the the duodenal bulb, deformity of the duodenal bulb and diverticulum of the duodenum. X-rays taken in September, 1952, showed scarring of the duodenal bulb with a large diverticulum of the duodeno-jejunal junction overlying the duodenal bulb and a smaller diverticulum of the second part of the duodenum (Fig. 9).

The patient was operated upon September 29, 1952, and a large diverticulum at the duodeno-jejunal junction was removed. The smaller duodenal diverticulum was on the medial side of the duodenum and was not readily apparent. Because of its small size and the fact that it emptied of barium readily, it was not dissected free. There was no gross deformity of the duodenal bulb. Along the mesenteric border of the upper jejunum were numerous small diverticula. These were not thought to be the cause of his trouble and were allowed to remain. Convalescence was uneventful, and the patient had a hydrocelectomy ten days later.

The patient got along well until June, 1953, at which time he had another episode of gastrointestinal bleeding with tarry stools. X-rays showed a duodenal ulcer but no evidence of any small bowel diverticula other than the small one in the duodenum. The patient chose to follow medical treatment for the ulcer and was discharged from the hospital.

Case 5.—Mrs. R. B. M., aged seventy-one, was first seen March 2, 1953, with an abscess due to foreign body (silk) reaction in a left lumbar sympathectomy wound. For twenty years the patient had suffered from diarrhea, gas, belching and rumbling noises in the abdomen. She had a gastroenterostomy, cholecystotomy, cholecystectomy and left lumbar sympathectomy. The abscess was incised and drained. Laboratory studies showed a hemoglobin deficiency with a color index of .82 and positive tests for occult blood in the stools. Sigmoidoscopy findings were negative. Complete gastrointestinal x-rays showed a functioning gastroenterostomy with a small jejunal diverticulum just distal to the anastomotic site. A larger diverticulum, 5 cm. in diameter, was also evident further down in the jejunum (Fig. 10).

The patient was discharged under medical care and while she continued to have symptoms, they were never severe enough to warrant operation in this elderly poor-risk patient.

Case 6.—Mrs. J. W., aged sixty-one, a colored housewife, was seen April 28, 1953, complaining of occasional bloating and gas most of the time for the past ten to twelve years. She had had pain in the left lower quadrant for the last five to six years. Severe vomiting had occurred two weeks previously. Appendectomy had been performed in 1923. The only positive finding on physical examination was a fibroid uterus. There was a trace of albumin and a moderate amount of pus in the urine. There was a mild anemia present with a normal color index. Kahn test gave negative findings. X-rays showed a diverticulum about ½ inch in diameter in the third portion of the duodenum and a diverticulum 1½ inches in diameter at the duodeno-jejunal junction. There were

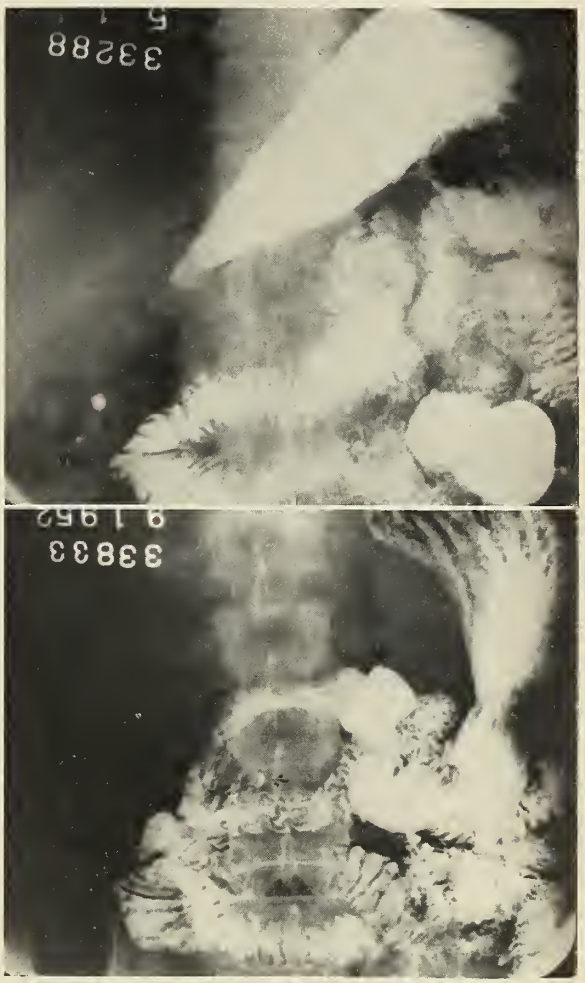


Fig. 8. *(Above)* X-ray showing large jejunal diverticulum in right lower corner.

Fig. 9. *(Below)* X-ray showing diverticulum of the duodenum and large diverticulum of first part of the jejunum.

also scattered diverticula of various sizes along the jejunum (Fig. 11). Diverticula were present in the splenic flexure and descending colon. Metallic injections were seen in the gluteal region. On May 9, 1953, the patient was placed on medical treatment and when seen two weeks later was improved.

Case 7.—Mr. A. K., aged seventy-one, was admitted on April 25, 1948, to the Veterans Administration Hospital at Dearborn, Michigan, with the complaint of bleeding from the rectum of twelve hours' duration. He had awakened at 4:00 a.m. with bloody diarrhea. He passed a large amount of bright red blood four or five times. He became weak, dizzy and perspired freely. Nausea

was present but no vomiting. He had never passed blood by rectum before this episode. Constipation had bothered him for fifteen years but had become progressively worse in the last year. For five years, he had dially which was relieved by food or alkalies.

In 1941, he had been in this same hospital because of progressive muscular atrophy and a duodenal ulcer which was shown by x-ray. The only other positive finding in

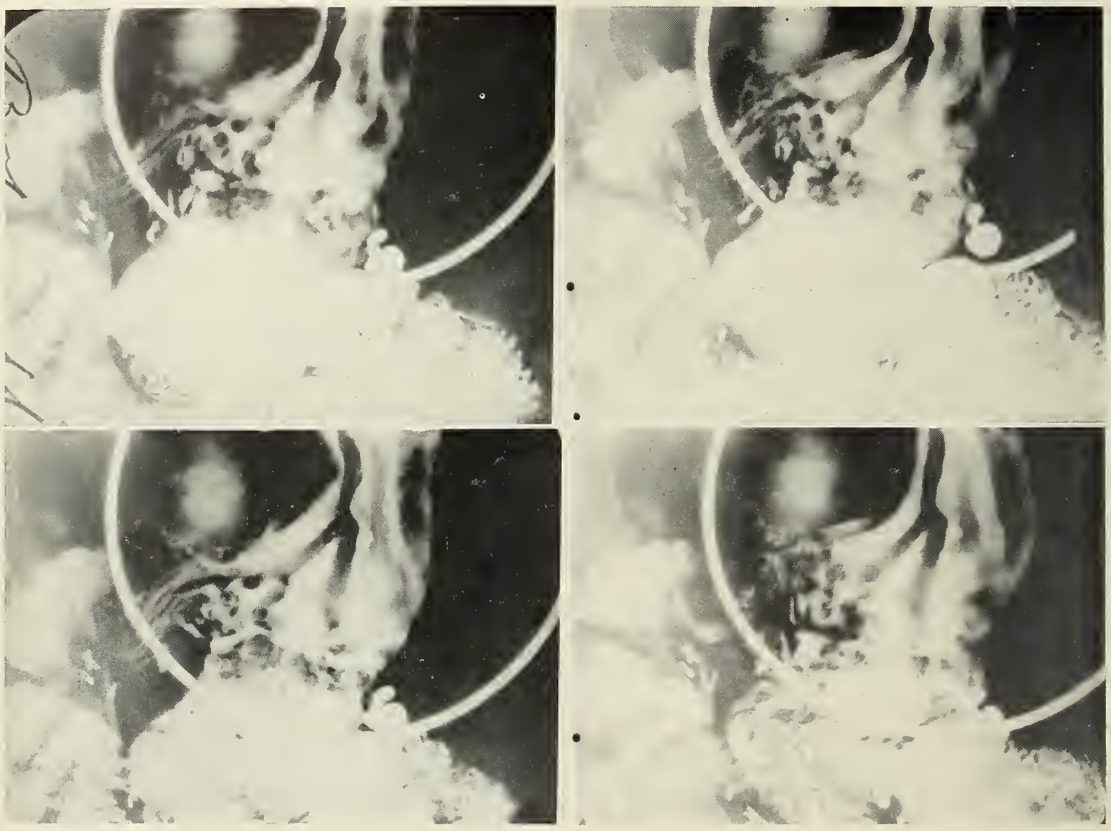


Fig. 10. Diverticulum of jejunum just distal to gastroenterostomy is shown just inside the pressure ring and below this, just outside of the ring, is the second and larger diverticulum.

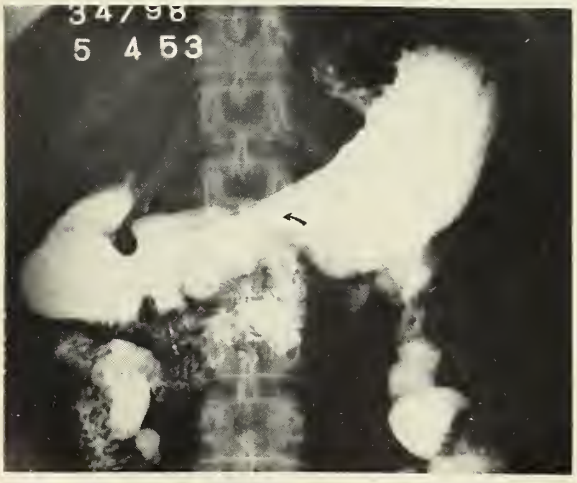


Fig. 11. Arrow points to large jejunal diverticulum with other diverticula below.

flatulence with gas with sweet, fried or greasy food. He had epigastric distress which he described as a sensation of "heaviness." He had pain twenty minutes postprandially which was relieved by food or alkalies.

In 1941, he had been in this same hospital because of progressive muscular atrophy and a duodenal ulcer which was shown by x-ray. The only other positive finding in his past history was dyspnea on exertion for two years and orthopnea.

The positive physical findings were a slightly distended abdomen and mild tenderness in the lower quadrants. There was slight voluntary muscle spasm. No palpable masses were present. Bowel sounds were audible. The rectum was filled with dark red, semisolid blood mixed with feces. The prostate was enlarged one plus.

On admittance, the blood pressure was 120/80, pulse 80 and hemoglobin 12 gm. Bleeding and clotting time were normal, and an x-ray of the abdomen showed a moderate degree of ileus. Proctoscopic and sigmoidoscopic examination showed only clotted blood. The patient was given 1,000 cc of blood, and the next day the red blood count was 4,420,000, hemoglobin 13.5 gm and non-protein nitrogen 46 mg per cent. On the third hospital day, barium enema showed numerous diverticula of the sigmoid colon.

On the fourth hospital day, operation was performed under spinal anesthesia. Palpation of the stomach and duodenum showed no abnormality. Eight inches from the ligament of Treitz, there were about ten diverticula of the jejunum extending for a space of about two feet (Fig.

12). The terminal six inches of ileum and the large bowel had a bluish color due to contained blood. There were numerous diverticula of the entire colon with clusters of diverticula in the sigmoid. The bleeding was thought to come from the diverticula, but from which area could not be determined. Therefore, a sigmoid colostomy was made to attempt to localize the bleeding. However, postoperatively the patient had no more bleeding and on June 25, 1948, the colostomy was closed. X-rays of the small bowel at this time showed only one diverticulum of the jejunum (Fig. 13).



Fig. 12. Diverticulum of the jejunum as seen at the operating table.

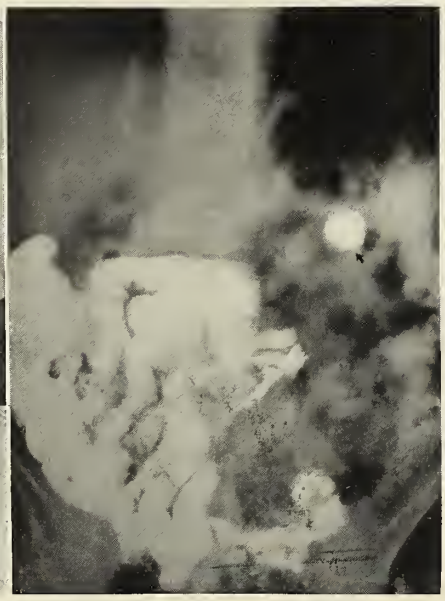


Fig. 13. Postoperative x-ray showing only one diverticulum although others are known to be present.

Two months later, the patient was seen because of progression of his muscular atrophy, but he had no further gastrointestinal complaints other than occasional pain in the left side when he was constipated.

Case 8.—Dr. J. H., aged sixty-six, entered the hospital because of advanced diverticulitis of the left colon with partial obstruction. A previous diagnosis of cirrhosis of the liver with esophageal varices had been established. On November 28, 1952, a resection of the sigmoid was performed by Dr. H. C. Saltzstein for an obstructing granulomatous mass. On December 4, 1952, the patient expired from a sudden exsanguinating hemorrhage from his esophageal varices. This was confirmed at autopsy. Postmortem examination of the small bowel showed it to contain multiple diverticula (Fig. 14).

Case 9.—Mrs. O. C., aged seventy-five, a colored woman, on admittance to the Receiving Hospital of Detroit, had passed blood per rectum twice in the last twenty-four hours. For three weeks she had dark stools mixed with blotted blood. There was an indefinite history of weight loss. There had been no nausea, vomiting, pain, loss of appetite or food intolerance. Mild chronic constipation was present. There was no jaundice or bleeding tendencies. She had been treated for arthritis for several years and had spent the last several months mainly in bed.

Examinations showed a well-developed, poorly nourished colored woman in no acute distress. Blood pressure was 170/95, pulse 100, respiration 20. The abdomen was soft with a suggestive, right lower quadrant mass. Rectal examination showed black and port-wine-colored stool.

The patient was treated with multiple blood transfusions. Bleeding stopped, and the blood picture became stabilized. Other laboratory findings were: alkaline phosphatase 1.3, urea nitrogen 31 mg./100 cc. blood, Kline-negative, sedimentation rate 52 mm/hr, and tuberculin test four plus. X-rays were taken of the upper and lower gastrointestinal tract with special studies of the small bowel and spine. These showed three diverticula of the second and third parts of the duodenum. The largest of these was 8 cm in diameter (Fig. 15). Multiple small diverticula of the jejunum were also shown (Fig. 16). Films of the spine showed destruction and collapse of L3 plus 4, which increased while the patient was in the hospital.

The patient was operated upon, and the three diverticula of the duodenum removed, as well as that portion of the jejunum containing numerous diverticula (Fig. 17). There was a thickened area in the proximal ileum containing an ulcerated center. Her bleeding was thought to have came from this ulcer. There was also a smooth, rounded retroperitoneal mass in the right ileo-psoas area.

The microscopic examination showed the ulcerated area in the ileum to be due to tuberculosis, and the spine lesion was also considered tubercular. The patient had an uneventful convalescence and was transferred to the Herman Kiefer Hospital for the care of her tuberculosis.



Fig. 14. Post-mortem specimen of jejunum showing diverticula.

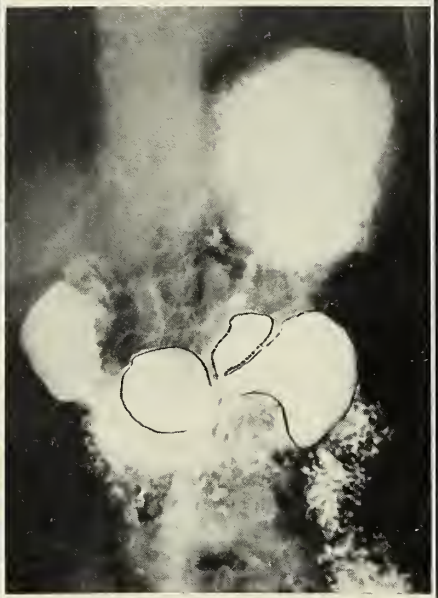


Fig. 15. X-ray demonstrating three large diverticula at the ligament of Treitz.



Fig. 16. Multiple jejunal diverticula.

Conclusions

1. Diverticula of the small bowel are not rare, the incidence at autopsy being reported as high as 1.3 per cent.



Fig. 17a. Surgical specimen of jejunum with diverticula.



Fig. 17b. Jejunum cut on antimesenteric border showing diverticula openings on the mesenteric side.

2. They are not easily seen by x-ray, and special attention must be paid to small bowel studies to detect them.

3. While many of these diverticula are silent, those that do cause trouble present no definite symptom complex. Anorexia, vague abdominal distress, cramps coming on an hour or two after eating and loud rumbling noises after meals should prompt an investigation of the small bowel by x-ray in addition to the usual gastrointestinal studies. When complications arise, the symptoms are those of the complication such as hemorrhage, peritonitis or obstruction.

4. Medical treatment will suffice in most cases, but where this is unsatisfactory or where complications arise, resection of the involved segment of the bowel is the best procedure.

5. Nine cases of diverticula of the jejunum and ileum are presented. One case was found at autopsy, two cases at the time of operation and six by x-ray examination. Of the latter, four were confirmed by operation. Of the five cases in which diverticula were seen at the time of operation, two did not have the diverticula removed. Of the four cases having resections for the diverticula, three showed symptomatic improvement. Symptoms in the fourth case were not due to the diverticula and, therefore, were not affected by removal of the diverticula.

Acknowledgments

Thanks are given to Dr. H. C. Saltzstein for his courtesy in allowing us to present Case 8 and to Dr. Charles G. Johnston, Professor of Surgery at Wayne University Medical School, for the use of Case 9, and to Dr. Gaylord S. Bates, Chief of Surgery at Veterans Hospital at the time of patient's admittance and to the Veterans Hospital at Dearborn for making Case 7 available.

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(Continued on Page 898)

Fundamentals in Medical Public Relations

By R. Wallace Teed, M.D.

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WHEN one analyzes the criticisms of the medical profession on the part of the public, one finds that the bulk of them relate to lapses in morality. Very seldom does one hear criticism of lack of training, or even of error in judgment, but one frequently hears about professional stealing (excessive fees), lying (secret division of fees), and mayhem (unnecessary surgery). The problem of securing better medical public relations would, therefore, seem to be not so much a nation-wide advertising campaign, as a profession-wide trip down the saw-dust trail. What medicine needs is not publicity, but religion.

In the process of selecting medical students, character references are included in the list of requirements, but very little attention in general is given to the problem of moral training and development during the period of medical education. It is more or less taken for granted, apparently, that this development has already taken place or that other agencies will take the responsibility for it. However, one has only to look around to discover all too plainly that in some physicians, character education has been sorely neglected.

Character development depends on polarity; that is, a proper relationship with one's Creator. If this vertical polarity is correct, the horizontal polarity towards one's fellow men is more apt to be satisfactory. The vertical look upward and the horizontal look outward form a right angle which means that all relationships will be right. A life with anything but this right angle is apt to be wrong.

Human nature seems to have been pretty much the same throughout history, and there has always been an admixture of good and bad in society of every age. Nevertheless, there have been variations in emphasis on character from time to time depending on other factors. For example, in the Egyptian and early Greek periods, little was known of the scientific basis of medicine, and the physician needed to be also a priest, since it was essential to placate or implore deities who were believed to control illnesses. With the introduction of physical theories of disease by Galen, much of the mystical element of practice disappeared. With it disappeared also some of the respect for moral values on the part of many physicians, but this may also have been part of the general decline in character during the so-called Dark Ages. Following the Renaissance of the Eighteenth Century, an upsurge in morality occurred, and we have such works as Sir Thomas Browne's immortal "Religio Medici" appearing to attest to this Renaissance.

About one hundred years ago, an advance in the scientific knowledge of medicine began, which has progressively tipped the educational balance in favor of the physical sciences, with less and less emphasis being placed on moral values in the educational process.

It is of more than passing interest to note that there has been a general relationship between medical public relations and medical morals. In Greece and Egypt, the physician was held in high esteem and enjoyed an important place in community life, while during the Dark Ages he was often the butt of ridicule. Barbers were accorded a higher place. For one hundred and fifty years after the Renaissance, the physician enjoyed a high degree of influence in community life, and one still hears reverent references to the beloved "horse and buggy" doctor.

The low point in modern public relations came apparently during the depression of the 1930's when politicians, sensing a growing lack of confidence in the medical profession on the part of the public, began an all-out campaign to take over the control of the practice of medicine. That they nearly succeeded is a matter of record. The medical profession, finally alerted to the danger of socialism, drew up a plan of action and hired expert public relations people to carry out a nationwide educational campaign, in which they stressed the good points of medical practice and warned of the evils of political control.

The problem of payment for modern medical care was also made a part of the Government's attempt to take over the medical profession. To answer this threat the great Blue Cross-Blue Shield Programs were set in motion, and at the present time they, along with other insurance plans, cover nearly half of the population of the United States. These plans have made phenomenal strides, but there is evidence of widespread abuse,

which, if uncorrected, could ruin the plans and bring about a condition which political action was unable to achieve.

The temporary lull in the battle brought about by these campaigns and the election of General Eisenhower has in no sense given the profession any reason for complacency. The evils which the public had criticized, are still present, although measures are being taken in an attempt to correct them. The recent speeches of Dr. Paul Hawley, Executive Secretary of the American College of Surgeons, pointing up such things as unnecessary surgery, fee-splitting, ghost surgery and excessive fees have been greeted with opposition by certain medical groups, but privately no one would deny the existence of these evils. Admission of a fault would harm no one, especially if he set about to correct it, but any attempt to deny an obvious wrong only lowers one in public esteem. The fact that only a small percentage of the profession, possibly 5 per cent, indulges in these practices does not relieve the other 95 per cent of responsibility. The public expects us to keep our house in order. If we do not, someone else will, and in such a case, not only medicine, but the public also, will be hurt.

The question has been raised as to why fee-splitting and ghost surgery are considered morally evil. The secret division of fees is wrong, not only because it deludes the patient, but also because of its tendency to collusion in unnecessary surgery, and its tendency to channel surgical cases into the least competent hands. Ghost surgery, in which one surgeon does the operation another is supposed to do, leads in the same direction. If the family physician works up a case which is operated by a surgeon, he is certainly entitled to a fee for his service, but it should not come to him from the surgeon as a part of his fee. If the surgeon feels that his fee should be reduced, the patient should be the beneficiary, not the referring physician. The confidence of the public is our greatest asset but it can only be maintained by strict honesty on our part.

What, you may ask, influences a medical man to depart from the Hippocratic tradition and engage in unethical practices? The answer, it would seem, is a loss of the fundamental principles of honesty and fair dealing, and a failure to observe the golden rule. A man may be thoroughly trained in the physical sciences, but if he has not accepted a basic Christian discipline for his life, materialism becomes his guiding influence. The result may be personal degradation for the physician, and collectively, poor public relations for the profession.

Another very disturbing result of this materialistic attitude is suicide. Every year, several members of the Michigan State Medical Society close their existence by their own hand. These men are our friends and colleagues, and their passing represents a personal loss as well as a loss to their families and to the community. Probably very few of these men are psychotic, but in some way they are unable to find a personally satisfying reason for being when the going becomes rough. Doctors are people, and in need of the same basic foundations for their lives as other people. If people build the house of their character on things like money, learning, popularity, health, beauty, self or any other unstable factor, they may find the structure crumbling under the impact of a severe storm. The only stable foundation for character is something indestructible and eternal, which existed before the world was created, and which will still exist when the world is destroyed; in other words, God.

Human beings are built in such a way that they need something to worship. The most worthy object of worship is the Creator Himself, but when this fact is not recognized, other objects, less worthy, are adopted. If these disintegrate, life may lose its meaning. One can only conclude that it is not what an individual knows, but what he believes, that is important.

One often hears a nostalgic reference to the old family doctor of the "horse and buggy" days. Educationally, his equipment was strictly limited, but he made up for this lack in spiritual insight and sympathetic human understanding. In his day, life was lived more slowly, and because travel was difficult, people stayed at home and learned to know their neighbors. Everyone knew the business of everyone else, and the physician, likewise, knew of the Widow Brown's other John and the extracurricular activities of Sally Jones and the travelling salesman from the city. A few well-directed questions could lead him, in a consultation, to the heart of the matter in a very short time. Also, in driving the long country roads, he had plenty of time to think of the case he had just seen, and what his therapy would be.

Probably most important of all was the fact that he did not remove the various spare parts of the body which are currently being sacrificed all over the land. He was an expert also in the treat-

ment of the so-called "nervous conditions" which have filled physician's offices throughout the centuries.

These conditions we now speak of as "psychosomatic," a term which indicates a change in the "soma," brought about by a disturbance in the "psyche." This latter is something which we recognize as a very real force, yet no one has ever been able to demonstrate it physically. It probably resides in the brain, but only as a function, not as a distinct part. Its presence, and potentiality for good or evil have been recognized from earliest times and different terms applied to it, such as: "heart," "soul," "spirit," "conscience," "instinct," "subconscious," "ego" and so forth.

The name is not important, but it is important to recognize the nature of this force, and its ability to produce physical symptoms. I say "physical" advisedly, because many physicians have inadvertently sent patients presenting these symptoms to cultists by dismissing them with the advice that the symptoms are "imaginary" and the best thing to do was to go home and forget them. The patient usually concluded, quite properly, that the physician was a fool, and medical public relations were not improved.

The job of managing these patients has always been considered that of the general practitioner, while the various specialists have quickly fluffed off such patients after satisfying themselves that no organic disease was present. However, it is my opinion that no specialist, surgical or otherwise, can duck his responsibility to these people. It would seem to me, in fact, that the specialist might be best equipped of all to care for these patients, since he is best prepared to examine the part concerned, and has had maximal experience in sifting functional from organic symptoms. Cooperation between general practitioner and the specialist is an absolute necessity, and we cannot turn these people away if we wish to maintain good public relations. Some of these patients will require psychiatric care, but there simply are not enough psychiatrists to take care of all of them.

The horse and buggy doctor took time to talk things over with his patient and find out what was weighing on his mind. Often he would find a resentment, an old grudge, or an unwillingness to overlook a slight. Knowing his Bible, he would present to the patient the cure—forgiveness, which is made to order for this type of tension. Christ said 2000 years ago: "If ye forgive not men their trespasses, neither will your Father forgive your trespasses."

Another very common cause of symptoms is fear. It may be of lack of security, of disability, of discovery, of death, or something else. How can we help the patient get rid of fear? The good Book again has the most intelligent answer ever given: "Perfect love casteth out fear." Hate causes fear and separates men; love eliminates fear and brings people together. It also releases the inner conflict brought about by fear and allows the patient to relax.

Peace of mind is a universal longing. Even a popular song pleads "set me free from doubt and longing," and even though it may be doubted if such an end could be gained in the arms of the loved one, it at least illustrates the point.

If peace of mind is important for the patient, for the physician it is even more so. For if he becomes tense and touchy, he can scarcely give the patient the sympathetic attention to which he is entitled, and the patient concludes that the physician either is not interested in him or does not like him. A few experiences of this kind can quickly result in negative public relations, since the public wants more than anything else to be liked by the doctor.

Many other examples of the relationship between "heart" problems and physical problems could be given, but I will not bore you. Suffice it to say that the Book in which the horse and buggy doctor found an understanding of "heart" or "psyche" problems is available also to you. There can be no question but that it is the greatest exposition on the "soul" or "spirit" ever written, and the physician who has a sincere desire to serve humanity in all its problems can do no less than peruse its pages carefully.

In closing, I would like to quote a poem in blank verse by an unknown author:

"Who shall measure devotion, or put a price on sacrifice?
Who shall assess the long war against the power of death?
Or set a sum upon the gift of life?
There is a service beyond the measure of a fee.
A cause above remuneration.
An ideal for which there is no price.
This is the service . . . the cause . . . the ideal . . . of the physician.
How shall we reckon it, and by what formulae?
How much for the laughter of a little child rescued out of crisis?
What is the cost of discouragement?
Who can pay for a sleepless night?
Name the price of a cure!

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Mucosal and Cutaneous Clues in Medicine and Surgery

By John Godwin Downing, M.D.

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MANY physicians of a generation ago were noted for their remarkable powers of observation. It was then a necessity, because they had been taught to make their diagnoses on purely clinical phenomena. Today there is a tendency to depend on laboratory procedures alone, and students are not trained in the precision of clinical examination. In cases of emergencies proper inspection of the patient may decide his future existence or disability. It takes only a few seconds to stop and notice the general appearance, especially the facies, the position, and extremities, and the reactions of the afflicted.

Such rapid inspection may be very revealing to a trained observer. The frightened face, the ashen gray color, the corpse-like nose, the cold sweating, with complaint of pain or compression in the chest, should suggest a coronary crisis or myocardial infarction. The dilated nostrils, cyanotic face, and small blisters about the mouth, with rapid breathing, need no extensive study to suggest an acute fulminating pneumonia. The signs described centuries ago by Hippocrates, the so-called Hippocratic facies, are still seen in generalized peritonitis and ileus with attending shock; namely, the pinched nose, the hollowed orbits, the collapsed temples, and the ears cold and contracted, with the lobes turned out. Generalized peritonitis, less frequent since the advent of antibiotic therapy, is now seen occasionally in patients receiveng ACTH or cortisone because they tend to mask intestinal infections. The Hippocratic facies, with a bluish-gray cyanosis, is seen in cholera and similar diseases. Dehydration in diabetic coma may show the same picture, with intense dryness of the mucous membranes, and wrinkling and looseness of the skin.

The patient's behavior is often helpful. Realization that unexpected laughter, or weeping, or anger in a known diabetic taking insulin are signs of hypoglycemia, the prompt giving of a lump of sugar may prevent disaster. It needs no skill to recognize the classic signs of marked hyperthyroidism—the shining bulging eyes, the thin hair, and the moist skin—but when these are not marked, it takes a keen physician to note the same signs.

Perhaps the sense of smell of the medical student has never developed because of too much contact with formaldehyde and cigarette smoke. Thirty-five years ago while passing a room in a contagious hospital with a professor of dermatology, he remarked that there was a case of smallpox there—he recognized the odor. The patient had been diagnosed as chickenpox, subsequent cases proved his diagnosis of smallpox. Pemphigus vulgaris has a characteristic odor. The peculiar odor of the moist syphilides on the feet of a negro will differentiate this disease from other pedal dermatitides. The odor of acetone on the breath of a diabetic may establish a diagnosis before it can be confirmed by the laboratory. Years ago it needed no great olefactory training to recognize wards of typhoid or genito-urinary patients. Various poisons can be recognized by their odor.

The recognition of these clues needs experience, but looking at the skin needs no great experience, although interpretation of the signs needs training. It has been said that more mistakes have been made by not looking than by not knowing.

The skin pictures the general health of the patient much better than any other organ. Age is reflected in the pink bloom of infancy, the oiliness and pasty appearance of adolescence, the disfiguring yellowish spots and telangiectasia of middle age and the wrinkled, thin, overstretched and dry appearance of old age. Physicians of previous generations trained their powers of observation, made full use of palpatation and carefully studied changes in the skin and mucous membranes; many diagnoses of systemic diseases resulted from their keen perception.

The expression "Stick out your tongue!" is rarely heard, but several clues may be obtained from observation of tongue and mouth. Dryness of these parts is a sign of dehydration and dietary deficiency. In diseases of the salivary glands, mumps, chronic parotitis or Sjogren's syndrome there may be marked dryness of the mouth. The lips and mouth are dry after hemorrhage, profuse sweating, diarrhea, and vomiting and overdosage of certain drugs such as atropine and methantheline bromide (banthine bromide). This condition

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is also seen in diabetes, pernicious anemia and in patients suffering from severe pain or psychosis. A coated tongue is seen in many infectious diseases. An enlarged tongue is seen in angioneurotic edema and in early acquired and congenital syphilis. Tremor of the tongue reveals the alcoholic or the sufferer from various diseases of the central nervous system or hyperthyroidism. An atrophic glossitis is seen in late syphilis, pernicious anemia, the Plummer-Vinson syndrome, sprue, and other avitaminoses. Excessive sweating is seen in patients with a rapid heart and systemic disease, notably tuberculosis, acute rheumatism, malaria, hyperthyroidism, and various febrile diseases. Recognition of the cold sweat of a patient in shock may be a life-saving observation, especially after an injection of certain drugs such as the arsphenamines or penicillin.

Today physicians fail to make use of facilities for observation and depend too much on mechanical devices and laboratory procedures, many of which are irrelevant or unnecessary; they piece the data together like a picture puzzle. The color of the skin may be the first lead for the diagnosis of an internal disease. Students should learn the normal color of the skin and mucous membranes of different races and ages and note the peculiarities due to climatic conditions or environment.

No one believes that systemic disease can be diagnosed entirely from the skin, but careful observation can be extremely valuable. Redness of the face, for example, may suggest polycythemia or Cushing's syndrome; capillary and arterial pulsation, an aortic insufficiency; cyanosis of the face, a paroxysmal tachycardia; malar flush, a yellowish forehead and blue lips, mitral stenosis; and petechial spots and pinkish, tender macules on the fingers and toes, an endocarditis. The earthy hue of the skin tinged with blueness suggests an emphysema. A ruddy cyanosis of the distal phalanges of the fingers and toes suggests arteriosclerosis in obesity, diabetes, and gout.

Many a systemic disease produces a cutaneous change in the initial or final stage. Often a clinical report starts with the statement that the patient first noticed spots on the skin. These occur so frequently and disappear so rapidly that they may have no clinical significance, except to suggest a certain category of disease, especially the infections. In fatal diseases the skin may give the first warning, as in pruritus or the pigmentary eruptions often seen with internal malignant tumors; in the latter the inflammatory lesions may precede mestastases. The inflammatory lesions may appear as macules, vesicles, bullae, or nodules. The latter are the most common, and are round, firm, skin-colored or pinkish-red, painless growths most frequently seen in the scalp and lower abdomen. After removal of a breast the first sign of a severe metastasis may be a brawny, bright-red eruption across the chest from the line of excision. It is usually misdiagnosed as erysipelas. I believe that every patient with a persistent, bizarre, vesicular or papular eruption of the body, not conforming to an accepted dermatologic entity, should have roentgen-ray examination of the gastrointestinal tract to rule out intra-abdominal cancer. Paget's disease of the nipple is often mistaken for eczema, especially when it occurs in a male. Dimpling of the skin of nipple should suggest Paget's disease. A depression or patch of hair on the sacroiliac region may reveal an underlying pilonidal sinus. With the use of hormones, such as ACTH and cortisone, it has been noted that these drugs produce the same cutaneous lesions as are produced by adrenocortical and pituitary tumors; namely, acne, hypertrichosis, and atrophic striae. The edema, discoloration, and enlargement of the leg veins, similar to that seen in late pregnancy, can also be caused by intrapelvic tumors. A malignant melanoma arising from the retina or central nervous system may present its first sign as a nonpigmented nodule on the skin.

Changes in the color of the skin may be produced by food and drugs. Carotene contributes the yellowish tinge to the skin. When the yellow component is in excess, the skin becomes a canary yellow, a condition called carotenoderma. The yellow color is marked on the palms and soles, and is distinguished from jaundice by its absence from the sclerae.

The color of jaundice may have a diagnostic value—the greenish or bronze color in obstructive jaundice; the orange or saffron color in the intrahepatic type; and the bluish tint seen in cardiac insufficiency. Prolonged jaundice in infants may result in a permanent green staining of the deciduous teeth. Atabrine stains the entire skin a greenish yellow, including the dorsa of the hands rather than the palms. It does not involve the sclerae. A peculiar waxy yellow is seen in patients suffering from myxedema.

Discoloration of the mouth may be first seen

by the dentist. A bluish-black pigmentation is seen in patients receiving bismuth. It is more diffusely distributed than that seen in lead poisoning. Extensive mottling of the teeth is seen in fluorine intoxication in workers in fertilizing plants. Argyria may be first noted in the mouth before the skin assumes its characteristic slate-gray color. It is scattered widely throughout the gingival and mucosal tissue, and is distinguished from the dirty-brown streaks and spots seen in Addison's disease. Round or oval patches of pigmentation are seen on the lips, gums, hard palate, and tongue of patients with generalized intestinal polyposis.

The relation of the eye to the skin makes many interesting syndromes. Iritis and iridocyclitis are seen in syphilis, tuberculosis, erysipelas, and herpes zoster. Syphilis shows eye complications in all stages, from primary lesions of the eyelids, iritis in the secondary stage, and so on to the primary optic atrophy. Destruction of the eyelids is frequently seen in tuberculosis of the skin. It is often difficult to differentiate erysipelas of the orbit from anthrax. In the latter, the absence of pain and the sharp line of demarcation without suppuration may suggest smears and cultures of the lesion for the bacillus of anthrax.

Ectropion is seen in severe ichthyosis, with heavy scaling, and loss of cilia. Tularemia may show on the conjunctivas yellowish ulcerations on brilliant red bases. A uveo-parotid fever with paralysis of the cranial nerves, especially the seventh, may be seen with nodular lesions on the skin. Bullous lesions and shrinking of the conjunctivas may be seen in severe erythema multiforme, pemphigus, and epidermolysis bullosa. In fact, ocular lesions may be present long before skin lesions appear.

Nodular lesions of the lids may be an accompaniment of erythema nodosa. I recently saw a woman suffering from dermatitis herpetiformis with opacities of the corneas. In xeroderma pigmentosa the first sign may be photophobia, later ulceration of the eye structure, then atrophy and ectropion. Several new syndromes have been recognized by the ophthalmologists. The combination of uveitis, associated with alopecia, poliosis, vitiligo, and deafness, has been labeled the Voyt-Koyanagi syndrome. The loss of hair appears weeks after the uveitis. A similar syndrome which also included retinal detachment was described by Harada. Sarcoidosis is frequently accompanied by uveitis, and poliosis may be seen in sympathetic ophthalmia. Recently Oliver reported a syndrome of nonsyphilitic interstitial keratitis with deafness associated with essential polyangitis (periartertis nodosa). There were tender nodular lesions on the extremities. In the Riley-Day syndrome (familial autonomic dysfunction), defective lacrimation, skin blotching, and excessive perspiration in a Jewish child with cyclic vomiting may suggest the diagnosis.

Horner's syndrome, sinking of the eyeball, drooping of the upper eyelid, constriction of the pupil, narrowing of the palpebral fissure and excessive sweating of the face has been seen after cervical sympathectomy. Cataracts may be found in cases of severe atopic dermatitis. They are also seen in the Rothmund syndrome in oldish appearing children with atrophy and ulceration of the skin of the lower extremities.

Marked pigmentation of the skin is seen in several intestinal disorders, as in Whipple's disease, ulcerative colitis, and sprue. Acanthosis nigricans is a rare pigmentation with papillomas occurring on the sides of the neck, axilla, and genitocrural region in adults suffering from abdominal malignancy. In the axillae there may be brownish-black, verrucous plaques. Two important discolorations of the abdominal wall are helpful in the diagnosis; namely, Cullen's sign in intraperitoneal hemorrhage, and Turner's sign in hemorrhagic pancreatitis. The former resembles a bruise on the umbilicus, bluish at first and then changing to various shades of green, yellow, and finally cream color. The latter shows a similar discoloration about the flanks and umbilicus. A bluish discoloration (ochronosis) of the ears is seen in patients with alkaptonuria; arthritis may be severe. There is occasional brownish-blue mottling of the neck, torso, and extremities. X-ray examination may reveal an osteoporosis, and the voided urine changes to a black color. Bluish pigmented spots are seen on the corneas in advanced cases. Bluish discoloration of the lips and nails is seen in patients suffering from cardiovascular or pulmonary disturbances.

Nutritional disturbances produce various mucosal and cutaneous manifestations. Vitamin A deficiency may result in gingival hypertrophy, dryness of the corneas, conjunctivas (xerophthalmia) and skin. Discolored, dark, hyperkeratotic papules appear on the posterior-lateral aspect of the arms, the outer aspect of the thighs, the sides of the neck, the back, elbows and knees. The scalp becomes very dry and the hair falls, with new hair breaking easily.

The oral manifestations of vitamin B deficiencies respond better than the cutaneous disturbances to suitable treatment. They range from angular cheilosis (perleche) to desquamation of the lips and tongue. The latter may become very painful and its color becomes a bluish-red. It has been suggested that the increase of cases of glossitis, black tongue, and scrotal dermatitis may be a vitamin B deficiency due to the continued use of the antibiotics. Outstanding is the combination of cutaneous rosacea and so-called rosacea keratitis. A painful glossitis may be the first symptom of pellagra. Ulcerations of the mouth are frequent. The tongue becomes denuded and brilliant red. The patient frequently complains of parathesia and painful ulcerations of the oral commissures. Persistent diarrhea, dermatitis, and some mental change complete the picture of pellagra.

Various purpuric eruptions may be seen after vitamin C or K deficiencies. Perifollicular petechial hemorrhages are characteristic of a lack of vitamin C. These patients show excrescences and gingival hemorrhages only in apposition to existing teeth.

Another disease recently considered as being due to a nutritional deficiency was described by Danbolt and Closs as "akrodermatitis enteropathica" and attributed by them to a disturbance of the gastrointestinal tract. The disease is characterized by a pustulous dermatitis, which is frequently familial and appears in early childhood, often after weaning. The dermatitis is preferentially located around the natural openings of the body and on the protruding parts of the head, trunk, and extremities (hence the term "akrodermatitis"). The terminal phalanges of the fingers are swollen, and there is pustulous paronychia and atrophy of the nails. Furthermore, there are total alopecia, photophobia and blepharitis and sometimes affections of the mucous membrane of the oral cavity (papillomas of the tongue). The disease tends to be chronic, with recurring exacerbations, during which there is diarrhea with foamy, foul-smelling, pale yellowish-gray stools. The calcium and phosphorus content of the urine is pronouncedly diminished.

The above disease is similar to the severe type of epidermolysis bullosa originally described by Wende in 1902, when he reported a case presenting unusual features. The chief characteristics were as follows: evidence of formation of vesicles and blebs at points subject to trauma and irritation; marked infiltration of the skin after the lesions subside; arrangement of the bullae in concentric patches; decided changes in the nails; lack of hair growth on the scalp and absence of eyelashes and eyebrows; and general tenuity of the skin.

These cases must be more common than reported in the literature, because I personally have had two such patients, both of whom died. Their pictures were seen by Danbolt, who accepted them as this entity.

In amyloidosis the tongue is enlarged, fissured, and nodular. The skin becomes thickened, pigmented and shiny, and many small, waxy, transparent papules appear on various parts of the skin. Severe urticaria may be seen in biliary disease and acute cholecystitis. A frequent finding in patients with liver disease is telangiectasis appearing on the face, neck, upper portions of the chest, shoulders, and arms. They are also seen in pregnant women. When associated with pregnancy they usually appear between the second and fifth months and increase in number until term; they usually disappear in a few days after delivery.

Pregnancy is frequently complicated by various cutaneous disturbances. Chronic dermatosis may be improved or aggravated. Pigmentation is increased, and the growth of melanomas may be stimulated. Pruritus and urticaria are fairly common. Papillomas (skin tabs) enlarge progressively until term and then regress. Patients are frequently treated for scabies, when they are really suffering from prurigo gestationis. This consists of excoriated papules on the extremities, upper chest, and flanks. A more serious type of eruption is herpes gestationis, which consists of grouped vesicles and bullae on an erythematous base. This eruption usually starts on the lower abdomen, spreading to the groins, breasts, and extremities. It is usually accompanied by intense itching and burning. Pregnant women may show a marked proliferative gingivitis, with tumors as large as a walnut. Oral hemorrhages and ulcerations may occur. These disappear after delivery.

Palmar erythema is often associated with liver disease. In hemochromatosis there is bronzing of the skin, loss of hair, a pigment cirrhosis of the liver, and diabetes.

Yellow nodules of various size, called xanthoma, may result from altered metabolism of the liver. The exact etiology of xanthomas is unknown. The commonest type of xanthoma is xanthelasma,

chamois-skin patches which involve the eyelids. This tends to be familial and may be seen early in patients suffering from hypertension or cardiovascular disease. Xanthoma tuberosum is also a frequent type of xanthoma. Yellow nodules or plaques appear over the large joints and buttocks. Tendon sheaths, the biliary tract, cardiovascular system, spleen, and lymph glands become infiltrated. There is usually an increase in the cholesterol and the blood lipoids. Xanthoma disseminata is a reddish-yellow, papular eruption involving the skin and mucous membranes. These patients have normal blood plasma lipoids. An eruptive type occurs in diabetes. It usually starts as small, glistening papules which look like tense vesicles, frequently in the inguinal region. They rapidly assume a yellowish or reddish-brown color, and become small nodules. Xanthomas secondary to diseases such as diabetes mellitus and jaundice tend to disappear with proper systemic treatment. Cutaneous xanthomas should suggest roentgenologic studies of the skull and long bones. They may lead to the discovery of diseases such as eosinophilic granuloma of the bones or Hand-Schuller-Christian's disease.

The combination of an enormous abdomen, bronzing of the skin, and a hemorrhagic diathesis should suggest the diagnosis of Gaucher's disease, and the finding of Gaucher's cells in the biopsy material from a peripheral lymph node or a splenic puncture should confirm the diagnosis. The diagnosis of the syndrome called Burger-Grutz disease is based on the finding of epithelial, yellowish, nodular lesions on the extensor surfaces. Frequently there are yellowish plaques on the oral mucosa.

Acute pancreatitis is accompanied by a pallor cyanosis or lividity of the face and a cold, clammy skin. Intestinal infestations may announce their presence by pruritic symptoms and lesions varying from a perianal eczema to the giant wheal.

In certain cases of thyrotoxicosis myxedematous changes are seen on the lower leg. These may consist of nonpitting, elevated plaques of the skin resembling pigskin. They occur on the anterior aspect of the lower exertmities, and are frequently seen after thyroidectomy. Extensive isinglass scaling is occasionally seen on the anterior aspect of the lower legs of women with hypothyroidism. A patient with hyperthyroidism may be so sensitive to sunlight that exposure of a few minutes produces severe redenning of the skin and blistering.

The skin of the sufferer from pituitary dysfunction may be raised in folds, especially in the scalp, causing cutis verticis gyrata. The hair is thick and coarse, as is the skin, which may be pigmented and freckled owing to melanin, especially in women. The plethoric skin, together with reddish or purplish abdominal striae and painful adiposity, should suggest Cushing's syndrome.

Deficiency of the islets of Langerhans may cause cutaneous entities such as necrobiosis lipoidica diabeticorum and xanthomatosis diabeticorum, may result from hemochromatosis, and may be associated with such nonspecific manifestations as intertrigo, gangrene, ulcers, bacterial and monilia infections, and trophic ulcers.

Ovarian hypofunction may be a factor in the production of hypertrichosis. I have seen this occur in young females who were later found to have ovarian cysts or some type of ovarian growth. Arrhenoblastoma especially can cause this disfigurement, and these patients frequently show a marked hirsutism of the male type, with a marked growth of beard. They may also suffer from baldness of the masculine type and a change of voice. Postmenstrual pruritus vulvae, with atrophy of the genitalia, and keratoderma climactericum of the palms and soles are simetimes relieved by hormonal therapy.

A persistent pruritus without a true picture of a definite dermatologic entity demands a thorough study of the patient. It may be only a dry skin due to senility, or some endocrine disorder. Endogenous toxins resulting from diabetes, renal or hepatic disease, gout, carcinomas, gastrointestinal or various psychiatric disturbances, may be the answer. Drugs are a common cause; also reflex mechanism from diseased organs such as chronic prostatitis, cholecystitis, or other forms of infection.

An acute ulcerative stomatitis may be the precursor of monocytic leukemia, and an acute exfoliating dermatitis may precede by months a change in the blood picture. The first symptom of a very severe blood dyscrasia, agranulocytosis, or malignant neutropenia may be a severe stomatitis that may progress to a gangrenous type. It is occasionally seen in patients taking certain types of drugs. I have seen it after arsphenamine, where the blood picture became so changed that the leukocytes were almost difficult to find.

In polycythemia vera, the dermatologist may be consulted for relief of the extreme redness of the face, which with accompanying itchy pa-

pules might be mistaken for rosacea. Examination of the mouth will frequently reveal intense redness, and examination of the blood which shows a marked increase of hemoglobin and erythrocytes should establish the diagnosis.

Anemia has various skin manifestations. Patients suffering from pernicious anemia may present a soft, yellow, waxy, delicate skin, with a bright-red eroded tongue. The first symptom may be burning of the tongue, a frequent complaint in the dermatologist's office. The tongue becomes fiery red and atrophic, especially the tip and the lateral edges. The sufferer from hypochromic anemia may present a yellowish-green tint of the skin. Dysphagic old women show a smooth, shiny tongue with fissuring at the corners of the mouth; they often have spoon nails. Ulcers of the skin are also observed in various types of anemia, especially in sickle-cell anemia found exclusively in Negroes. Here punched-out ulcers are frequently seen just above the ankles.

Purpuric eruptions on the skin may result from deficiency of fibrinogen or prothrombin, diminution of blood platelets or increased capillary permeability. Purpura may result from many different factors: heredity, avitaminosis, allergy, anaphylaxis infection, drugs, and physical anomalies. It may be accompanied by arthralgic symptoms or severe gastrointestinal disturbances.

Many varied types of eruption accompany the leukemias. The nonspecific lesions may be wheals, extravasation of the blood, papules, vesicles (single or grouped), bullae, or ulcerations. Herpes zoster is frequently associated with the lymphatic group. Specific lesions due to infiltration of the leukemic process in the skin are those producing erythroderma, nodules, and tumors; the last may break down into ulcerations. Nodules appear most frequently on the face. The syndrome of glandular swelling of the neck, weakness, malaise, fever, and weight-loss called Hodgkins granuloma may be accompanied by severe pruritus, resulting in extensive excoriations. Generalized pigmentation frequently occurs.

In all cases of exfoliative dermatitis, Hodgkin's disease should be ruled out. The clinician should bear in mind that any chronic skin disease, whether it starts as a simple scaly eruption, such as parapsoriasis or psoriasis, or a vesicular eruption, like a chronic eczema, may eventually terminate as a fatal lymphoma. Hodgkin's disease should always be suspected in a persistent dermatitis exfoliatina, even if there is no visible adenopathy. I have seen more cases in the last few years than in all my previous years of practice.

As a result of the free use of penicillin we are seeing more infections of the skin which on culturing, show an abundance of Gram-negative bacilli, such as ulcerations due to Pseudomonas aeruginosa, so-called echthyma gangrenosum. Characteristic clues consisting of petechial hemorrhages in the mucous membranes of the mouth and eyes, and also on the palms and soles are seen in meningococcal meningitis.

A serious disease is a condition called granuloma gangraenescens, which begins in the form of necrotic ulcers in the skin and mucous membranes of the nose, in the mouth as similar ulcers or granulomatous tumor-like growths. The lesions spread to the skeleton of the face causing destructive osteomyelitis and ending in the destruction of the entire center of the face and in death. The final stage is one of frightful necrotic destruction of the mouth, nose, eyes, and upper jaws, with a resulting cavity in which the tongue and esophagus remain usually unaffected. The disease runs its course in a few months to a few years.

The most characteristic lesions of bacterial endocarditis are the peculiar petechiae which are found both on the skin and conjunctiva. On the palms and fingers, soles and toes, pinkish macules which may become hemorrhagic, and later pigmented, are occasionally seen. Osler's nodes, which consist of small, red, tender swellings, may also be present on the tips of the fingers and toes. Various other cutaneous manifestations such as purpura, erythematous nodules, macular, ringed lesions, and splinter hemorrhages may occasionally be seen. The cutaneous manifestations of lupus erythematosus may also be associated with a verrucous endocarditis.

One is not apt to think of trichiniasis in a patient presenting a mild eruption of the skin. Years ago I saw a series of cases misdiagnosed as typhoid. These patients showed various types of cutaneous eruption. Some presented a mottled erythema, others bright-red macules similar to the rose spots of typhoid and one showed an erythema-multiforme-like type of eruption. The history revealed that all sufferers had eaten raw sausage at the same picnic. Subsequent symptoms with edema of the face, muscle soreness, and remittent fever, plus marked eosinophilia, revealed the true diagnosis of trichiniasis. Conjunctival hemorrhages are

frequently seen in this disease, plus splinter hemorrhages beneath the nails.

Annular and circinate areas of erythema are most often seen in rheumatic children on the trunk and upper parts of the extremities. In very acute cases red, swollen patches over the joints may appear. Urticaria and purpura are often seen. Subcutaneous nodules along the tendons and about the large joints may appear in crops and remain for a long time. Over the elbows and knees these nodes may persist and enlarge.

Various sized and colored pigmented lesions accompanied by nodular lesions may suggest a systemic tumor which may be part of a neurofibromatosis, in which tumors may be found in the brain, spinal cord, bones, adrenal glands, thorax, and abdomen. The presence of small, pinkish-red papules (adenoma sebaceum) centrally located on the face may be part of a triad of tuberous sclerosis involving the hair and mixed tumors of other organs such as the kidneys or heart. Hemagiomas of the skin may be accompanied by similar growths in the central nervous system. Facial angiomata may be associated with vascular nevi of the pia, atrophy, and calcification of the cortex. The clinical signs may be epilepsy, contralateral hemiparesthesia and hemianopsia, and glaucoma (Sturge-Weber's syndrome.)

Angiomata seen in infants should not be treated lightly, for they may be connected with similar enlargement of the underlying vessels and affect the child from head to toe. A unilateral, nonelevated, extensive naevus flammeus (port wine stain) may be the first sign of a hemihypertrophy in which the patient later shows premature varicose veins early in life, and then a hypertrophy affecting all the tissue on the involved side, with enlargement of the skeletal bones and even an arterio-venous fistulae. These patients may show excessive secretion of the sweat and sebaceous glands. The hair is often darker and longer on the affected side. Maffuci described nodules appearing on the small bones of the hands and feet of children, with dilated veins and bluish angiomata on the extremities. These patients suffer frequently from fractures and deformities.

Dark red nodules on the face and extensor surfaces of the skin should suggest roentgen-ray examination of the lung field to rule out sarcoidosis. Several systemic granulomatous diseases affect the mucous membranes and the skin. As in sarcoidosis, they may affect the skin in the form of various colored nodules; the eye, with keratitis, iritis, and uveitis. The Heerfordt syndrome, uveoparotid fever, may have skin lesions associated with sarcoidosis, tuberculosis, leukemia, and lymphoma. Systemic fungus diseases such as coccidiomycosis may present cutaneous nodules and ulcerations. The subcutaneous nodules of polyarteritis may become necrotic and gangrenous ulcerations. Wegener described a combination of granulomas and polyarteritis with a destructive lesion in the nose.

Ill-defined patches on the face, hands, and toes may be the initial clues of acute lupus erythematosus disseminata in young girls presenting a septic temperature, joint pains, lymph-node enlargement, gastrointestinal disturbances, and prostration. Later, polyserositis, leukopenia, increased globulin, renal disease and verrucous endocarditis complete the picture called Libman-Sacks' syndrome. The early recognition of this disease prompting the use of ACTH or cortisone may be life-saving.

The cutaneous lesions of periarteritis nodosa range from purpura to areas of necrosis; subcutaneous nodules are frequently found. In a patient who complains of inability to swallow more than a few mouthfuls of liquid, especially while lying down, the finding of a patch of tense, yellowish-white, indurated skin may furnish the diagnosis of scleroderma, which can be confirmed by fluoroscopy of the esophagus.

Conclusion

Look and learn! Many diseases may be misdiagnosed, not because the physician does not know, but because he does not look at the patient thoroughly. This is true not only in the field of internal medicine, but also in surgery and the various specialties such as eye and ear, nose and throat. Even the pathologist can be helped in his final diagnosis by observing the clinical lesions. Careful observation of the patient, his mucous membranes, and skin will often supply valuable clues for diagnosis. Frequently the first sign of a systemic disease may be seen by the dentist on the oral mucous membrane. Many systemic diseases start with a mild eruption on the skin. In these days of multiple drug therapy it is very important that the physician be able to differentiate between eruptions caused by drugs and those due to systemic diseases. The surgeon should have a

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Atabrin in the Treatment of Trichomonas Infestation in the Prostate

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TRICHOMONAS vaginalis was first described by Donne,[3,17] in 1837, but it was not until 1883 that Kunstler[10] reported the first case of Trichomonas infestation in the male. Since Trichomonas vaginalis was first isolated, there has been much difference of opinion concerning its pathogenicity. Recently, Lanceley[11] reported that three of five male volunteers inoculated per urethra with Trichomonas vaginalis developed a urethritis, and two of these three also developed a prostatitis.

All authorities agree that once the organism becomes established in the male genital tract, it is eradicated with difficulty. That no treatment is completely satisfactory is evidenced by the number of drugs and methods of cure advocated in textbooks and in current literature. Until recently, all attention was directed toward eliminating the organism from the female genital tract, probably because of the lower reported incidence in males. Stuhler[18] found only sixteen cases in 32,000 prostatic smears examined at the Mayo Clinic. However, Drummond[5] reported 80 per cent of the husbands of infected women harbored trichomonads, and Roth[15] reported a 4 per cent incidence in white males and a 28 per cent incidence in colored males.

Attention has been focused gradually on the male as a reservoir of infection, as indicated by the work of Baumeister[2] and Riba;[14] and it is being recognized that the refractory cases in women are probably re-infections from the male partner. Feo[6] has summarized the results of an extensive survey with the statement, "The male is the important transmitter of Trichomonas vaginalis infestation, while the female eventually becomes the reservoir of infection." These conclusions have been supported by Allen,[1] Strain,[16] Peterson,[13] Lydon,[12] and Hammer.[8]

Of the recent drugs, carbarson, acetarsone, and picric acid are reported as being very effective in the female, and many drugs have been reported as useful in the treatment of trichomonad infestation in the male. However, in the treatment of our cases we have found the antibiotics, the sulfas, and calcium mandelates of no value in eradicating trichomonads lodged in the prostate. Glen[7] has had encouraging results by placing male patients on an oral saturated solution of potassium iodide for a two-week period. Hosoya[9] has developed an extract of trichomonads, Trichomycin, which he reports as showing a trichomonacidal and trichomonadostatic action on Trichomonas vaginalis *in vitro* and *in vivo* in experimental mouse peritonitis.

After successfully eliminating trichomonad infestations in the prostates of four male patients with Atabrin, we consider it the drug of choice. Each of the patients presented the symptom of a morning drop or a chronic backache. The prostate was found to be boggy and tender, and there were many trichomonads present in the prostatic fluid. The men were placed on 0.2 gm of Atabrin q.i.d. for one week. If trichomonads were still present at the end of the week, the course of treatment was repeated. In all four cases, the trichomonads were eliminated at the end of three courses of Atabrin therapy.

Discussion

Atabrin was chosen as the drug to be used in treating Trichomonas infestation of the prostate for two reasons. First, it is known to be effective on Giardia, another flagellate found in the duodenum. Second, no cases of trichomonad infestation of the male were reported from the South Pacific during World War II, while numbers of such cases were being found in other areas. Men in the South Pacific were routinely given Atabrin as a preventative for malaria.

A disadvantage to the patients is that Atabrin stains the skin yellow, but this yellow color demonstrates a great advantage which Atabrin has over many other drugs. It permeates the tissues. It is possible to demonstrate fluorescence in the hair and nails with a Woods lamp.

Trichomoniasis is an ascending urinary tract infection, probably due to sexual contact. It may cause a burning on urination, a morning drop, or a purulent urethral discharge. The low reported incidence of trichomonads in the male may be due to inadequate examination of the urine, urethral

discharge or prostatic fluid. Many times, the wet preparations are examined without a cover slip under low power after the specimen has stood for a considerable length of time. This is comparable to searching for motile trophozoites of amoeba in a cold stool specimen. The specimen must be examined at once. In the case of prostatic fluid, it is of particular importance that a cover slip be used and the preparation be examined under high power. The trichomonads in prostatic fluid are not as active as they are in urine or in a urethral discharge and can be easily missed under low power. The organisms are identified by the flagella and the undulating membrane.

Several less simple methods of examining specimens for trichomonads can be used. They are readily visible under the dark field microscope. The phase microscope can be used to reveal the inner structures of the organism. When slides are dried with a special technique, they can be stained with carbol fuchsin, Giemsa, or any of a number of stains. In such preparations, the presence of flagella is the identifying characteristic.

It is possible to culture trichomonads on special media, such as Beck's or Hogue's.[4]

Unsuspected trichomoniasis in the male may be the cause of refractive cases in the female, and conversely the male may continue to be infected from the female. The only satisfactory treatment can be obtained when both the male and female are treated at the same time.

Summary

1. Trichomonas infestation in the male is more common than is suspected and is probably an important cause of refractive cases in the female.

2. Trichomonas infestation in the male may not be diagnosed unless specimens are examined carefully under the proper conditions.

3. Four cases of trichomonad infestation in the male responded to Atabrin therapy within three weeks.

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PATIENTS ARE PEOPLE

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The art of medicine without the science of medicine is a sort of backslapping form of charlatanism. On the other hand, the science of medicine, unwarmed by the art, is a frosty impersonal thing. Blending the two ingredients, the art and the science, in proper proportions and applying the mixture judiciously to the human being is traditional. It is good medicine. I suspect it may well be the Balm of Gilead to sooth the troubled spirits of our body politic in matters medical.

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Peptic Ulcer, Gastric Cancer, and Gallstones in Private Radiologic Practice

Frequency of Occurrence

By Harper G. Sichler, M.D.
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THE ACTUAL incidence of occurrence of peptic ulcer, gastric cancer, and gallstones, in the thousands of gastro-intestinal and gall-bladder x-ray examinations done each day throughout the country, is a subject on which the available information is quite scant and incomplete. The information that is now available is based largely on old autopsy record reports, dating back twenty or thirty years in many cases, as found in the leading medical textbooks.

Thus Palmer, in Cecil's "Textbook of Medicine"[3] in his opening discussion of peptic ulcer, states that it is estimated that 10 per cent of all people suffer from chronic gastric or duodenal ulcer at some time during their lifetime. Concerning gastric cancer, Palmer[2] says only that it kills more people than any other type of cancer, but gives no figures or percentages of its actual incidence of occurrence. Christian, in his "Principles and Practice of Medicine,"[4] says of peptic ulcer, that autopsy records show an occurrence of 1.32 per cent in the United States, 5 per cent in Europe, and 4.2 per cent in London. Concerning gastric cancer, Christian[5] says that 150 cases of gastric cancer were found in 8,464 medical cases in Johns Hopkins, or an incidence of 1.8 per cent. Neither Christian nor Cecil give any figures or percentages for the actual occurrence of gall stones.

The most completc report of the actual rate of occurrence of gastric cancer which we have found is that of Bloch, Griep and Pollard,[1] in 1949, who reported finding 1,913 cases of gastric cancer over a twenty-year period among 453,400 patient registrations at the University Hospital, Ann Arbor, a rate of incidence of only 0.42 per cent. This, of course, includes infants and children.

In general agreement with these findings, Scott[12] reported thirteen cases of gastric ulcer in 1,346 patients at a Naval Hospital, an incidence of 0.98 per cent, and 325 duodenal ulcers, or a rate of occurrence of 24 per cent.

As regards the radiographic occurrence of gallstones, data are extremely limited, and are derived largely from reports of first uses of new cholecystographic drugs. Thus Hefke,[9] in 1944, reported an incidence of gallstones of 12 per cent in 600 cholecystograms, with another 10 per cent nonfunctioning and 8 per cent poor function. Christenson and Sosman[6] found a higher rate of occurrence of 20 per cent for gallstones in fifty cholecystograms using the new dye Telepaque. Greenlee[8] et al, in 100 consecutive cases using Telepaque found gallstones in only nine cases, or 9 per cent.

In recent years, the attempt to use radiologic means for screening large numbers of apparently normal people for stomach cancer, has resulted in some reports of the positive findings. Thus Rigler[10] found three gastric cancers in 544 selected patients, or 0.55 per cent. He says that the usual incidence of stomach cancer is only 0.3 per cent in people over the age of forty-five, or three cases per thousand people. In a similar cancer-screening operation, Morgan[11] et al, using photofluorographic methods, found twenty-three proved cases of stomach cancer in 10,000 routine out-patients at Johns Hopkins, or 0.2 per cent, and cancer was suspected but not proved in thirteen other cases of this test group.

Eusterman and Balfour,[7] in their book on the stomach and duodenum, in 1935, reported an incidence of occurrence of 1 per cent of gastric ulcer in the patients having gastro-intestinal examinations at the Mayo Clinic, and this figure is confirmed by our current findings.

In order to compare our own results with those of others, and to confirm or deny an impression that our positive findings might be unusually high or low, the results of our last two years for routine gastro-intestinal and gall-bladder radiological examinations were tabulated, as follows:

Gastro-intestinal x-ray examinations:

Total cases—724	100	per cent
Duodenal ulcer—174	24.15	per cent
Gastric ulcer—8	1.10	per cent
Gastric cancer—5	0.69	per cent
*Miscellaneous—108	14.69	per cent
Negative—429	59.45	per cent

*Includes: diaphragmatic hernia, gastritis, diverticuli, transpyloric prolapse, et cetera.

Gall-bladder examinations:

Total cases—314	100	per cent
Gallstones—37	11.4	per cent
Non-functioning gall bladder—26	8.2	per cent
Poor function of gall bladder—35	11.3	per cent
Good function (negative)—216	69.1	per cent

From these figures, it is safe to arrive at the general conclusion that approximately one-quarter (25 per cent) of routine, unselected gastro-intestinal examinations will show a peptic ulcer (95 per cent duodenal, 5 per cent gastric), slightly more than half of 1 per cent (0.69 per cent) will have gastric carcinoma, and 15 per cent will be found with miscellaneous lesions, such as hiatus hernia, gastritis, transpyloric mucosal prolapse, diverticuli, et cetera. The remainder of approximately 60 per cent will have negative findings. In the case of gall-bladder examinations, a pattern of 10-10-10-70 per cent is clearly indicated, so that we may say that 10 per cent of gall-bladder x-ray examinations will show gallstones, 10 per cent will have a poor function, and another 10 per cent will be non-functioning gall bladders, of which large proportion would probably be found to contain soft non-opaque stones, if they were surgically removed. The remaining 70 per cent would reveal negative findings, that is, have good dye-concentrating function with no stones. The proportion of negative findings would probably rise considerably in large clinics and hospitals, where a large number of routine examinations were conducted as part of a physical work-up, or wherever large numbers of insurance examinations were performed.

Summary and Conclusion

The actual frequency of occurrence of peptic ulcer, gastric carcinoma, and gallstones, as found in private radiologic office practice, has been determined. The results indicate an incidence of approximately 24 per cent for duodenal ulcer, 1.0 per cent for gastric ulcer, 0.69 per cent for gastric carcinoma, and 11.5 per cent for gallstones. Nearly three-fourths (70 per cent) of the findings in the gall-bladder examinations were negative, and 60 per cent of those in the gastro-intestinal examinations. The figures conform rather closely with the scant previous autopsy and clinical reports, and indicate the incidence of these lesions to be expected in present radiological examinations. It is anticipated that a higher proportion of negative findings will be found in large clinics and hospitals, where a large number of routine examinations are conducted as part of a general physical work-up, and wherever large numbers of routine insurance examinations are performed.

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301 Seymour Avenue

The solution of the problem of carcinoma of the stomach obviously lies in case finding or, more correctly, in the finding of early cases.

* * *

Unless the diagnosis is made relatively early, no technical or other skill will avail the patient with gastric cancer.

In gastric cancer, nothing equals in value a well-taken clinical history.

* * *

The solution of the problem of gastric cancer is more vigor in prosecution of the diagnostic routine and a prompter and far more general resort to exploratory laparotomy in doubtful cases.

Lenticular Transplants

By R. A. Poirier, M.D.

Detroit, Michigan

MANY OPERATIONS have been devised for cataracts. The intracapsular extraction has been the most widely accepted surgical procedure, although it has left much to be desired. The advent of plastic compounds, however, has presented a new concept in cataract surgery.

Harold Ridley,[4,5,6] of London, in 1949, substituted an acrylic lens for the cataractous lens. His results, as reported in 1952, were astonishing. A description of the lens he used is as follows:

Material	Transpex I
Diameter	8.35 mm.
Thickness	2.4 mm.
Anterior curve diameter	17.8 mm.
Posterior curve diameter	10.7 mm.
Refractive power in aqueous	24 diopters
Refractive index	1.33

A groove was cut into the periphery of the lens to facilitate ease of handling. The weight of the lens was only 15 per cent heavier than the aqueous it deplaced. Ridley's lens compared to the normal lens was found to be slightly less in diameter and somewhat higher in dioptric power. Transplex (a polymethyl methiacrylate) was chosen because of its lack of activity in living tissue. Cases following airplane accidents have been observed to retain this material for years with no sign of ocular irritation.

The surgical technique of the operation is rather simple. Either pre-incisional or post-incisional corneal scleral sutures should be placed. A corneal incision is then made of one's choice and enlarged. The pupil should be moderately dilated. A wide bite is then made into the anterior capsule. The lens is expressed and all flocculent material is then washed out. At this point, a Hague lamp is useful to detect any remnants of lens capsule and cortical material. If it is difficult to clear the pupillary area, the incision may be closed at this time after a peripheral iridotomy is done. The next step can be taken when the eye is white. If the surgeon is satisfied with the operation, the plastic lens is inserted into the lenticular fossa, the less convex surface of the lens placed anteriorly. Gentle replacement of the iris is then done. A small hook lens expressor or iris hook is useful to replace the superior flap of the iris by carefully rolling the hook under the iris and making a sweeping motion superiorly. A peripheral iridotomy is then done. The anterior chamber is again irrigated and the incision is closed. Gentle probing is then done with the fingers about the limbus to insure settlement of the lens into the patellar fossa. An air bubble is then placed in the anterior chamber. No dilatary or constricting drugs are used at the time of closure. Both eyes are then bandaged for twenty-four hours. The pupil should be dilated as soon as the anterior chamber is formed. The lens is held in position by the pressure of the iris anteriorly and the posterior capsule of the lens posteriorly. The lens is taut, thus keeping the capsule free of wrinkles. The lens also keeps better tonus within the eye which tends to prevent retinal detachment, iris prolapse, and vitreous opacities due to vitreous shrinkage.

Postoperative complications, when they occur, are more difficult to treat then in the routine intra-capsular extraction. The following complications have been observed:

1. Hyphemia, which absorbs slowly, tends to leave fibrin and blood pigment on the lens. I do not believe this incident is any higher than in the routine cataract procedure.

2. Iritis, which is usually serous in nature, responds as a rule to ordinary therapy. It does occur more frequently in this procedure than in the intra-capsular operation. A plastic iritis also occurs which responds much more slowly to treatment. A plastic exudate may cover the lens, and posterior synechia may be formed. The posterior synechiae are very persistent and frequently cause the eye to be irritated from the pull of the iris sphincter muscle. Surgical intervention may be necessary to free the iris margin from the lens. I know of two cases where this was considered necessary (Reese[3] and Poirier[2]).

3. Luxation and subluxation have been reported but are rare if proper surgical technique has been done.

4. Opacification of the transplanted lens due to the humeral or tissue action has not been observed. However, time has been much too short

to predict the transparency of the lens in the future.

5. Thickening of the posterior lens capsule. If this is suspected, a posterior capsulotomy may be done at the time of surgery.

6. Chromatic aberration, probably due to the difference in the absorption of wave lengths of light by the artificial lens. The shorter wave lengths absorbed more than in the natural lens.

7. The presence of posterior polar cataract that could not be diagnosed previous to surgery, may also be found (Poirier[2]).

8. Iris prolapse, delayed closure of the wound, expulsive subretinal and choroidal hemorrhages, et cetera, are considered the same as in routine cataract surgery.

The advantages of the lenticular transplant are chiefly optical. They are enumerated as follows:

1. Anisometropia. The patient is able to see binocularly, frequently has less than 2 diopters of anisometropia. Also depth of focus and fusion is obtained in most cases.

2. Elimination of heavy spectacles.

3. Wide peripheral vision.

In summary, the acrylic lens offers the ophthalmologist a new technique to be used in selected cases. I believe that the operation should be reserved for those who have a unilateral cataract and who, for occupational reasons, need binocular vision. The results are most gratifying when one sees an engineer return to his trade, or a skilled worker return to his lathe. This would be next to impossible if a routine cataract surgery had been done. Only further observation will tell whether the acrylic lens will remain transparent and in proper apposition. Contrary to the beliefs of some others[1,7], I believe that the operation should be considered more than an experiment. There is certainly a place for cataract surgery that will allow an individual to pursue his occupation. Whether or not this procedure will come to be used routinely, only time will tell.

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MUCOSAL AND CUTANEOUS CLUES IN MEDICINE AND SURGERY

(Continued from Page 887)

knowledge of the cutaneous lesions which are physical signs of important abdominal disturbances. The obstetrician should be cognizant of the various cutaneous eruptions that complicate pregnancy. The internist should recognize the various pigment changes that occur on the skin from nutritional and metabolic disturbances. The hematologist should know the various cutaneous lesions which often accompany blood dyscrasias. The cardiologist should not discard the suggestive skin lesions which may appear before corroboration can be made by the stethoscope or electrocardiogram. Finally, the dermatologist should be cognizant of the various cutaneous symptoms and signs which should prompt him to co-operate with other clinicians working in the various fields of medicine.

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Medical Doctors in Kalamazoo County

By R. C. Hildreth, M.D.

Kalamazoo, Michigan

THE NUMBER of medical doctors in Kalamazoo County in Southwestern Michigan has increased more rapidly since 1935 than has the county population. A review of available medical personnel in this county tends to support the contention that doctors are being turned out in increasing numbers, as reported in the June issue of the *Journal of the Tennessee State Medical Association,* in the article entitled "The Truth About Medical Education."

In 1935, the Kalamazoo Academy of Medicine included many physicians from Allegan, Van Buren and St. Joseph Counties as well as Kalamazoo County. In regard to counting the number of doctors in any given area, the AMA statisticians have pointed out fallacies of using county line boundaries. This is because medical care is no respecter of county lines. Many are the doctors in our state who make use of hospitals in counties apart from their place of residence.

To maintain some order of consistency over a seventeen-year period, however, the data below refer only to medical doctors residing within Kalamazoo County in the years 1935, 1940, 1945, 1950 and January, 1954.

January, 1954, finds 184 medical doctors with residence inside this county. To arrive at a figure representative of those in active community medical practice, we exclude four in retirement, nineteen in the Upjohn Company, nine in Kalamazoo State Hospital, ten internes and residents in two local general hospitals, four in the armed services and three otherwise inactive in medical practice. Hospital internes are classed as temporary residents; the area had none before 1946. The remaining 135 medical doctors are those in active medical practice in the county. This figure of 135 is to be compared with 117, 100, 90 and 76 for the years 1950, 1945, 1940 and 1935 respectively. Population data for the County reveal 127,000 for 1950, 115,000 for 1945, 105,000 for 1940 and 95,000 for 1935.

A composite photograph of the doctors in the Kalamazoo Academy of Medicine was made in 1938. This was found to be of significant aid in the review of community physicians. It permitted appreciation of the fact that more than an average number of physicians met their demise during the seventeen-year span. This phenomenon leaves the comunmity with a top-heavy preponderance of youth in its present active practitioners. Another group of some twelve physicians came to the community, practiced a few years and then left for various causes. These twelve are not recorded since they practiced during years other than those counted in the survey. A final value of the photograph was appreciated in the realization of the outstanding "specialization" shift. The 1938 picture shows 123 men (from four counties), and 116 of this number performed house calls. Of the present 135 medical doctors within Kalamazoo County, it is estimated that sixty-one make house calls.

Another item reflected in the over-all analysis was that 60 per cent of the active county medical doctors entered the armed services during World War II. No serious community complications appeared in the county during this crisis.

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CALCIUM THERAPY FOR NEUROMUSCULAR IRRITABILITY IN PREGNANCY

(Continued from Page 863)

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The 1954 Annual Session of the AMA

The Annual Session of the House of Delegates of the AMA, held in San Francisco in June, was a great success.

Probably the most outstanding features of the session were the orderly manner in which the meeting was run, the fine work of the reference committees and the expert handling of the House of Delegates by the Speaker and Vice-speaker. Also the unanimity of thought displayed by the majority of the delegates on controversial questions must be mentioned.

The House of Delegates again stood behind its previous decisions against federal medical and hospital care for veterans with non-service connected injuries and diseases.

The inclusion of the medical profession by government fiat in the Social Security Program was disapproved.

Approval of so-called federal "re-insurance" for health insurance, voluntary and commercial, was withheld.

A resolution introduced by the Texas delegation on the subject of co-operation with national health organizations, such as the National Foundation for Infantile Paralysis, the American Cancer Society, the American Red Cross and others, asking for close, friendly co-operation on the scientific aspects of new therapies, particularly in the planning of comprehensive programs of new treatments, was passed. This action by the AMA House of Delegates was noted with some satisfaction by those members of the MSMS Executive Committee of The Council present in San Francisco.

A moratorium on the constant discussion of "principles" about fee splitting was asked.

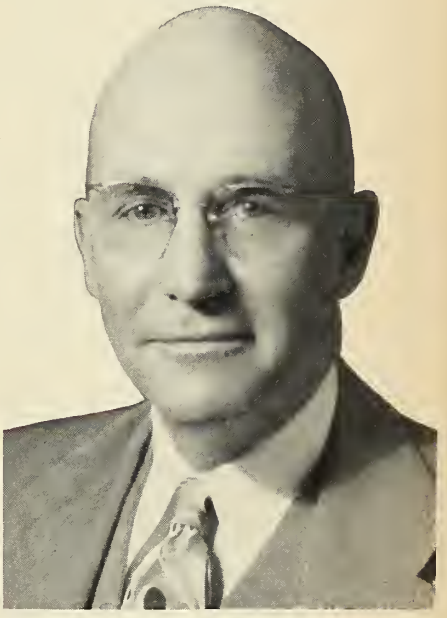
Robert L. Novy, M.D., Detroit, was elected to the Council on Medical Service of the AMA. This is an honor for MSMS and recognition of Dr. Novy's fine work in the field of medical service.

William A. Hyland, M.D., Grand Rapids, is thanked for his fine handling of the Michigan delegation and for his unusual ability to co-operate with other state delegations.

L. W. Hull

President, Michigan State Medical Society

President's



Message

Editorial

SOLD DOWN THE RIVER?

CONGRESS is nearing the end of its session until after elections. It may have adjourned by the time this number of THE JOURNAL is printed. The President has suggested a legislative program involving the health and welfare of the nation. We have made comments about the general ideas proposed and, while endorsing many, have been critical of some features. The Congress has been somewhat co-operative, but not entirely. We heard a hint from a national commentator to the effect that if the President's program were not passed he would call an extra session of the Congress fifteen minutes after it adjourns. The President is insisting on certain features of his comprehensive program. So far, so well.

The administration definitely has indicated where it stands on many controversial programs. It is time to reconsider and re-evaluate. The medical profession endorsed wholeheartedly General Eisenhower's candidacy, believing he would see certain governmental activities from our standpoint, rather than the truly socialistic plans being followed by his predecessors. Let us look at some items.

Social Security

The medical profession and most of the other self-employed professions (law, dentistry, engineering, architecture) have for years resisted the urge to blanket them completely in the Social Security system. Complete coverage of the nation seems to be the great ideal of that un-economic plan. Last year, the American Medical Association, in its annual session, asked to be exempted from the Social Security "benefits." Mrs. Hobby and her advisors included them in the bill submitted to Congress. When the House Committee first reported the measure, medicine was still included, but some telegrams and other messages changed that item, the bill passing the House with the medical profession deleted. Now, the Senate is having hearings. Mrs. Hobby had four and a half hours to testify, others generous time, but the only opposition got four minutes.

Mrs. Hobby is testifying to the bill not as passed by the House, exempting the medical profession, but as it was first written with the medical profession included.

Social Security is one item of the New Deal program which, having once started, is probably permanent. However, it should be corrected. We believe many of its features are worthy, but as applied to the self-employed professions, the system is absolutely unfair. The plan is properly loaded for the benefit of the poorly paid laborer who absolutely needs some protection. Everybody admits that those who earn only $100.00 a month are needy. They will benefit by the bill as now on the books by receiving "benefits" of $55.00 per month upon retirement at age sixty-five. The next $100.00 a month adds $15.00 to the benefits, and the additional $100.00, bring the worker up to full limit of taxable earnings, also brings him another $15.00, to a toltal of $85 per month.

The proposed bill will raise the basic amount to $4,200.00 per year, or $350.00 per month. The moderately paid workers will be eligible to maximum "benefits." The current effort is to bring in the well-paid people, and especially the self-employed professions. These are the people who do not desire the unsound, unfair, uneconomic retirement rule at sixty-five. Members of the professions, particularly medicine, almost always keep on working until they die. Social Security refuses them their "benefits" if they earn $75 or more. per month. In other words, we are to be taken involuntarily into a scheme set to collect a considerable tax and never give us any of the so-called "benefits" until after an extra ten years of service, at age seventy-five.

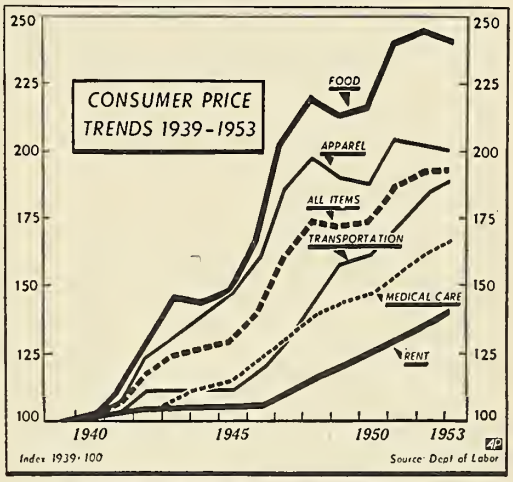
Many of us remember when a constitutional amendment was adopted allowing the Federal Government to assess a graduated income tax. We were told in no uncertain terms that the tax would never be large, probably never over 3 to 5 per cent at the most. The amendment was passed and the tax was modest for awhile, but what has happened now? Where is the limit? The personal tax goes to the 92 per cent bracket, and the business and industrial tax starts at 52 per cent, and has carried an almost confiscatory profits tax.

Social Security, under the present law, will reach 6 per cent (3 plus 3) and 8 per cent (4 plus 4) in 1960. Nothing will prevent Congress from again raising the basic amount (they are doing it now) and also raising the tax to 10 per cent or any other figure. And, remember, this is a tax on GROSS income, not net.

One downright unjust feature in the Social Security bill could and should be removed. The bill is a tax with partial benefit to the professions. The provision of forfeiture of benefits, if a person works and earns a little sadly needed living money, should be removed. That is only simple justice. These older people who are able or willing to work will still be contributing to the fund through their earnings and continuing tax. Another partial equalizing factor could be to cease collection of the tax when a person reaches sixty-five. Government would not buy that, however, even though it has some merits.

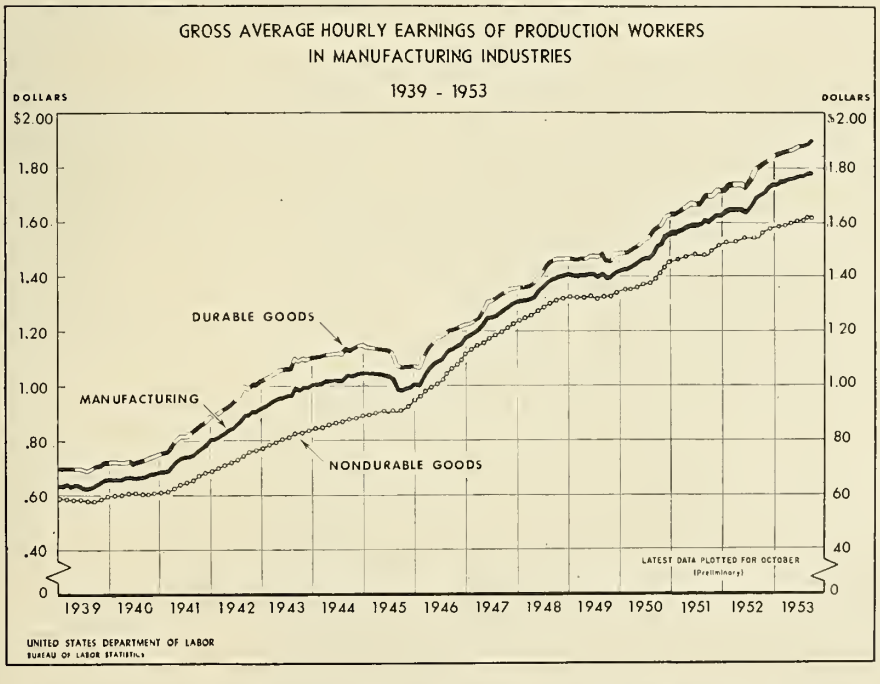
COMPARATIVE ECONOMICS

THE chart "Consumer Price Trends," issued by the Department of Labor as a part of the President's Report to the Nation, will bear careful scrutiny. The only indicated grouping of activities that advanced slower than medicine during the period covered (1939 to 1953) was rents, which were under federal limiting control. Al-



This Chart Was Issued in Connection with the President's Report

most universally one hears comments that medical bills are high. They have advanced from the 1939 index of 100 to 170 in 1953. Rent went to 140, transportation to 190, apparel to 200, foods



This chart shows that the average hourly wages of non-durable goods workers went from $0.60 in 1939 to $1.62 in 1953. Manufacturing workers went from $0.64 to $1.79 during the same years, and workers in durable goods went from $0.70 in 1939 to $1.90 in 1953. This is much more of an increase than the costs of commodities shown in the President's chart, if one will determine the percentages.

to 240, and all commodities (which must indicate the overall average) to 190.

We wrote to the United States Department of Labor and asked for a tabulation of the whole income of the United States during these same years, to be used as a comparison. Instead, we received the chart entitled "Gross Average Hourly Earnings of Production Workers in Manufacturing Industries," reproduced herewith.

REINSURANCE

THE BLUE SHIELD Commission at its national conference passed a resolution to the effect that the Administration's reinsurance program was unnecessary and would not give the voluntary health plans any benefits they cannot receive under present considerations. We have commented before on this measure, can see no advantage for the medical profession, and believe the hospital group has been misled. The plan proposes to give only limited reinsurance benefits, and after five years each reinsured group must be self-contained, not only paying its own costs and benefits but repaying the Federal Government whatever it may have invested. The voluntary groups might better write their own reinsurance. They have demonstrated ability to pioneer in a new field of "insurance" and also to make their overhead costs minimal: an accomplishment never reached by a governmental bureaucracy.

We see in the reinsurance proposal a subsidy pure and simple. The medical profession should remember what a subsidy might accomplish. The Supreme Court decided not too long ago that any program which the government subsidizes, it may also control. We definitely do not want bureaucrats from Washington telling us what our voluntary health insurance plans may and may not do. Our plans are efficient and economical. Such a "captured" industry could be the opening wedge for complete compulsory socialized medicine for the whole country. We want none of it. *Letters to our Senators are not yet too late.*

MEDICAL EXPENSES

SEVERAL bills are under consideration to reduce the income tax by allowing our patients to deduct, as expense before taxes, all medical and hospital bills. We thoroughly believe this is a good measure and that it should pass.

DIVERTICULA OF THE JEJUNUM AND ILEUM

(Continued from Page 877)

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16778 Westmoreland Road

Everything's Shipshape Now!

The metamorphosis at 606 Townsend Street, Lansing, is almost complete.

The sturdy mansion, which became the "new home" of MSMS three years ago, has been transformed into attractive office quarters, both inside and out, providing a convenient and suitable headquarters for the medical profession's organization in Michigan. Completion of a reception room, pleasantly furnished and carpeted, in the entry hall of the remodeled building, is all that remains to be done later this year.

Guided by the Finance Committee, The Council wisely spread the renovation of the building over a three-year period, budgeting "first things first."

It was in July, 1951, that the MSMS staff, all the administrative records, numerous office machines and mailing equipment were moved to the new address after having been housed over sixteen years at 2020 Olds Tower. The new headquarters at that time still had the appearance and layout of the three-story apartment building to which it had been converted in the World War II period.

The first step was to install modern fluorescent fixtures throughout the house. Then the interior was completely redecorated and a new heating plant was installed. By the summer of 1952 there was no mistaking 606 Townsend for anything but a bustling business office, once the visitor was inside the door.

In 1953, the roomy parking area to the rear was paved and curbing added. The driveway was hard-surfaced and preliminary landscaping begun.

Then last spring came the "plastic surgery" on the exterior of the headquarters building. The unattractive old front porch was removed, one front window sealed with brick, and a simple, modern white-pillared entrance added. In the peak of the entry porch was mounted a caduceus, carved from wood by MSMS Councilor William M. LeFevre, M.D., of Muskegon.

The brick was cleaned and pointed. As a final touch, the exterior trim was painted a brilliant white.

Landscaping of the building lot and the adjacent corner lot was completed this summer, and now a healthy lawn covers the grounds.

In purchasing for MSMS a home of its own, The Council exhibited true foresight. The headquarters is convenient to downtown Lansing, the Capitol and the Post Office, yet is far enough removed to get away from downtown congestion and the accompanying traffic and parking problems. Expanded MSMS activities in recent years have created the need for more office space; there are offices on all three floors of the building, and in the basement is the mailing and duplicating department along with ample storage space.

After three years, 606 Townsend is shipshape, snug and teeming with activity. The next time you are in Lansing, Doctor, just drop in and see. You will be proud of your MSMS home.



COMPARE this building with the picture on the cover. Here's how 606 Townsend Street, Lansing, looked when MSMS took it over for headquarters. The interior is now a modern office.

WAYNE UNIVERSITY COLLEGE OF MEDICINE

Postgraduate Continuation Courses

First Quarter—September 13 to December 4, 1954

These courses are open to all qualified persons.

Veterans receiving benefits under the G.I. Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5524 Cass Avenue.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1401 Rivard, before September 11, 1954.

Title of Course	Place	Time	Fee
	ANATOMY		
Special Dissection: (Depending on availability of material. Contact Dr. Gardner).	College of Medicine	Tuesday, 1 to 5	$50.00
	MICROBIOLOGY		
Seminar	College of Medicine	Thursday, 3:30 to 5	$15.00
	PHYSIOLOGICAL CHEMISTRY		
Seminar	College of Medicine	Wednesday, 3 to 4:15	$15.00
	PHYSIOLOGY AND PHARMACOLOGY		
Seminar	College of Medicine	Tuesday, 4 to 5	$15.00
Survey of Physiology	College of Medicine	Monday, 4 to 5	$15.00
	PATHOLOGY		
Beginning Nematology	College of Medicine	Monday, 1 to 5	$50.00
Dermatopathology	College of Medicine	Wednesday, 1 to 5	$50.00
	DERMATOLOGY		
Seminar—Dermatology	Receiving Hospital, Farwell Annex	Wednesday, 10 to 12	$15.00
Seminar—Dermatopathology	Receiving Hospital, Farwell Annex	Wednesday, 1 to 2	$15.00
	INTERNAL MEDICINE		
Medical Conference (limit 15)	Receiving Hospital, Farwell Annex, Room 243	Monday, 5 to 6	$15.00
Electrocardiography	College of Medicine Auditorium	Thursday' 5 to 6 (3 quarters)	$45.00
Gastroenterologic Clinic (limit 10)	Receiving Hospital, Farwell Annex, Room 243	Saturday, 8 to 9	$15.00
Medical X-Ray Conference	Receiving Hospital, Farwell Annex, Room 243	1st, 3rd, and 5th Tuesday, 11 to 12	$15.00
Electrocardiographic Conference	Receiving Hospital, Farwell Annex, Room 243	2nd and 4th Tuesday, 11 to 12	$15.00
Endocrinology and Metabolism Conference	Receiving Hospital, Farwell Annex, Room 243	Wednesday, 5 to 6	$15.00
	ONCOLOGY		
Cancer Detection Clinic	Yates Clinic	Daily, 3 to 5	$25.00
	SURGERY		
Seminar	College of Medicine	Monday, 4 to 5	$15.00
	Comprehensive Unit Courses		
	OPHTHALMOLOGY		
Basic Ophthalmology	Kresge Eye Institute 690 Mullett St.	Daily, 8 to 5 (3 quarters)	$500.00

Floor Show Entertainers — MSMS Annual Session

State Society Night — Sheraton-Cadillac Hotel — September 30, 1954

Ravel—He is one of the greatest single entertainers in show business. He features a very clever comedy exposé of magic illusion work with the help of a few members of the audience. It is a lot of hilarious comedy. Mr. Ravel, a very personable chap, has a lot of excellent comedy material. He has a way of making the "assistants" feel at ease. Futhermore, he is a splendid Master of Ceremonies.



Elma Santa—This lovely and vivacious young lady is a wonderful musician. She strolls with her accordion and leads community singing. She has a very charming personality and mingles easily with the guests. Her repertoire is unlimited and she can play almost any tune requested.





Ralph Bowen and His Orchestra — This very fine orchestra is under the direction of Mr. Bowen. They have had a great deal of experience in handling entertainment programs and are one of the best orchestras to be had. All the members of the band are very good musicians, each in his own right.



Roger Ray—Mr. Ray presents one of the funniest comedy acts ever seen. His material is smart and up to the minute. He uses a marimba in his act, but this is merely the foil for a lot of jokes. He has been featured at leading theatres, hotels and smart supper clubs throughout the country. He is currently appearing in Las Vegas, after just completing a two-week engagement at the famed Chicago Theatre.

Dancing and Entertainment 10:30 P.M. to 1:30 A.M.

Annual Reports

ANNUAL REPORT OF THE COUNCIL—1953-54

The Council had three sessions totalling seven days and the Executive Committee of the Council convened nine days (to September 26, 1954), a total of twelve meetings up to the 1954 Annual Session of the Michigan State Medical Society. This represented a total of 123 hours of deliberations—equivalent to 15 days and 3 hours on an eight-hour working basis—but not including additional time necessarily spent by members going to and returning from meetings of the Council and its Executive Committee held in various sections of the State.

All matters studied (930 items) and recommendations made by the Council's eighteen Committees as well as by the Society's twenty-one committees, and all business of the Society were routinely referred to the Council or its Executive Committee for consideration and action.

Membership

Membership as of June 30 and of December 31 from 1935 to 1954 is indicated in the following chart:

	1954	1953	1952	1950	1945	1940	1935
June 30	5,111	4,977	4,776	4,881	4,425	4,401	3,410
December 31	.....	5,530	5,337	5,114	4,686	4,527	3,653

The figures for 1954 include 4,684 Active Members, 186 Emeritus and Life Members, 23 Retired Members and 214 Associate and Military Members and 4 Honorary Members.

Finances

As in the past, the first item of new business on the monthly agenda of the Council or its Executive Committee is "Study of Monthly Financial Reports." Every thirty days, therefore, the Society's financial picture is reviewed and governing policies established. In addition, the Finance Committee meets periodically to study and to advise the Council on particular fiscal questions.

The auditor's report for 1953 plus the budgets of the Society for 1954 were published in JMSMS, March Number, beginning on page 301. Members are invited to acquaint themselves with the financial status of their State Medical Society and to offer suggestions; these, always are truly appreciated. As of June 30, 1954, 4,684 members paid Society dues amounting to $93,560.00. This was on the basis of $20.00 per member allocated to the General Fund as established by the Council in January 1954, and includes some payments by new members of portions of a year. An equal amount accrued to the Public Education Account, Public Service Account and Professional Relations Account for current activities as directed by the Council in January 1954. $9,356.50 was set aside in a Building Fund as well as $7,017.46 in a contingent surplus fund. A brief financial résumé of each of the MSMS activities as of June 30, 1954 is herewith presented:

The AMA dues collected by county medical societies and forwarded to MSMS and then to the American Medical Association during the six months to June 30, 1954, totaled $114,550.00. The very high percentage of American Medical Association dues being paid by MSMS members (98.3%) is to be noted; the Council feels that the members of our State Society are to be congratulated on their tangible co-operation with and support of the American Medical Association. A résumé of the financial condition of the Michigan State Medical Society as of August 31, 1954, will be presented to the House of Delegates at its opening session of September 27, 1954, as a part of the Council's Supplemental Report. Thus far in 1954, $30,000.00 of the funds of the Michigan State Medical Society have been invested in short-term government securities. These funds are invested during the early part of the year when income resulting from dues payments is high and thus earns interest for the MSMS rather than having the funds remain idle in a commercial account. These securities mature later in the year when income is low and expenses continue at the regular rate. Any securities maturing, the funds from which are not immediately required, will be reinvested upon the advice of the Finance Committee.

Financial Report for Period Ending June 30, 1954

Account	On Hand 1/1/54	Income to 7/1/54	Expenses to 7/1/54	Balance on Hand 7/1/54
General Fund	$72,893.41	$95,202.67	$55,300.07	$112,796.01
Annual Session	.....	22,600.00	2,870.10	19,729.90
Michigan Clinical Institute	.....	12,460.00	11,510.48	949.52
The Journal	.....	44,250.96	31,733.85	12,517.11
Public Education	59,887.04	42,150.50	12,328.48	89,709.06
Public Service	.....	21,034.12	10,307.85	10,726.27
Professional Relations	.....	30,382.63	15,929.33	14,453.30
Public Education Reserve	30,000.00	.....	.....	30,000.00
Rheumatic Fever Control	9,571.69	9,500.00	12,617.66	6,454.03
Surplus from Dues	21,729.67	7,017.46	.....	28,747.13
Building Fund	13,002.15	9,356.50	5,197.71	17,160.94
Beaumont Memorial Fund	9,742.16 CR	2,659.00	.....	7,083.16 CR
Totals	$197,341.80	$296,613.84	$157,795.53	$336,160.11

The Journal

The Journal of the Michigan State Medical Society is now completing its fifty-second year of uninterrupted publication. It was established under the direction of the late Andrew P. Biddle, M.D., one of the outstanding leaders in Michigan medicine in the early part of the century. Succeeding editors have attempted to follow through with many of the ideals he represented.

The Journal has been strictly an intimate and continuous contact between our members and readers and the elected leaders of the profession. It has been used for the publication of scientific papers, communications, reports, book reviews, news items, biographical data, activities of various groups, and has devoted its attention especially to socio-economic problems having a direct bearing upon the practice of medicine in our state and in the nation.

Editorially, we have constantly attempted to present in The Journal the objectives and the ideals of the State Medical Society and its members. The editorials have been socio-economic rather than scientific. We have tried to anticipate challenges which the profession must meet. We have tried to keep our readers informed of problems before us. We have continued to devote much space and many editorials to the problem of social medicine. The socialized medicine threat may be lessened but there is still a social problem. We have presented critical analyses of the federal health and welfare program endorsing what we could and opposing what we must.

For a great many years, Michigan has been a leader in medical affairs. This leadership has been recognized, praised as well as fostered in The Journal. A surprising number of Michigan men have attained prominence in their special endeavors to the extent of presidency of national organizations, or of special recognition for their attainments. (See Item 6 under "Organization").

This present year THE JOURNAL has in almost every instance appeared well within the month date line. We hope the problem of late publication is solved. The expense of publication has constantly increased with higher costs of paper, labor and materials. We have tried to curtail some items and have saved many pages by publishing less frequently lists of committees, officials, et cetera. Also, last September the roster was published in one volume as a supplement. It carried almost enough advertising to cover its expense—a fact which we consider remarkable in a first attempt. This year, we suggest that more pages be made available for advertising in the roster.

For many years, various issues of THE JOURNAL have been devoted to some special interest or project of medicine and the Michigan State Medical Society. No two covers have been alike. During the past year Numbers have been devoted to the Michigan State Medical Society Annual Session, venereal disease, arthritis, diabetes, Michigan Health Council, heart, Michigan Clinical Institute, crippled children, epilepsy, cancer, Beaumont and geriatrics, and Michigan Medical Service. Most of the special dedications through 1955 have already been determined.

A great many of our members have contributed articles, committee reports, comments, and book reviews. In conducting his own special department—the editorials, the Editor has consulted regularly with all members of the Publication Committee and the executive officers of the Society including the President, the President-Elect, the Secretary, the Chairman of The Council, and the Executive Director. When dealing with special topics, he has consulted various members who have special knowledge. The Council expresses its sincere appreciation to these men. Their comments have been most valuable.

Comparison of Total Pages, Advertising Pages, Cost of Publication and Advertising Sales Revenue January-June, 1953-1954

	Total Pages		Advertising Pages		Cost of Publication		Adv. Sales	Revenue
Mo.	1953	1954	1953	1954	1953	1954	1953	1954
Jan.	116	124	36-1/8	44-7/8	2,539.47	3,061.43	3,652.69	4,745 93
Feb.	124	116	42-3/8	46	2,657.27	2,898.82	3,999.39	5,169.99
March	116	116	37	50-3/8	2,456.48	3,073 30	3,668.19	5,583.92
April	124	124	39-5/8	50-1/2	2,731.34	3,286.75	3,964.19	5,587.99
May	108	132	41-3/4	51-7/8	2,194.03	3,278.26	4,298.57	5,903.34
June	124	116	41-1/4	50-3/4	2,842.60	3,218.93	4,247.58	5,532.71
Totals	712	728	238-1/8	294-1/8	15,421.19	18,817.49	23,830.61	32,523.88

Organization

1. The Annual County Secretaries-Public Relations Conference was held in Detroit, January 31, 1954; the third annual meeting of Michigan's County Medical Society Executive Secretaries was held in Lansing on February 10, 1954. The programs of both these meetings stimulated greater organizational effort.

2. The Eighth Michigan Clinical Institute was held in Detroit, March 10-11-12, 1954, with an attendance of 2,503—the all-time record registration. Innovations: (a) one was the use of color television, featured through the courtesy of Smith, Kline & French Laboratories, Philadelphia; (b) the new "Award for Excellence in Medical Reporting" was presented to Jack Pickering of the *Detroit Times*.

3. The usual semi-annual meetings of the six Delegates from Michigan to the American Medical Association, plus Grover C. Penberthy, M.D., Detroit, Surgical Section Delegate, were held with the Executive Committee of The Council before the June and December sessions of the AMA.

4. The Student American Medical Association as well as the residents and interns of Michigan were recognized at a special conference arranged for these young men and women on March 11 in Detroit, coincident with the Michigan Clinical Institute; the success of this meeting, in which Michigan Medical Service co-operated, recommends its institution as an annual event. The future of Medicine lies in the hands of these youths whose zeal—manifest at the March 11 Conference—forecasts a good tomorrow for the profession.

MSMS continued to sponsor financially the sending of delegates and alternate delegates from Michigan's two medical schools to the Student AMA convention in Chicago.

5. The 88th MSMS Annual Session in Grand Rapids, September 23-24-25, 1953, clocked a total registration of 3,266, including 1,704 M.D.'s, a record for MSMS sessions in the Furniture City.

6. Michigan's medical leaders are more abundant today than ever before: four MSMS members were elected during the past year as Presidents of national medical societies: Howard P. Doub, M.D., Detroit, President, American College of Radiology; E. W. Schnoor, M.D., Grand Rapids, President of Federation of State Medical Examining Boards; L. W. Shaffer, M.D., Detroit, President of the American Venereal Disease Association; and John M. Sheldon, M.D., Ann Arbor, President of the American Academy of Allergy. In addition, R. L. Novy, M.D., Detroit, was elected by the AMA as a member of its Council on Medical Service.

7. Cancer. On November 12, 1953, the Michigan Cancer Co-ordinating Committee was organized with representation from the American Cancer Society, Michigan Division, Inc.; American Cancer Society, Southeastern Michigan Division; Michigan Department of Health; Michigan Health Officers Association; Michigan State Dental Association and the Michigan State Medical Society. Under the chairmanship of C. Allen Payne, M.D., of Grand Rapids, the Cancer Co-ordinating Committee's program of integration, to eliminate duplication and to stimulate concentrated activity in cancer control, bodes well for future joint effort of cancer work in this State.

8. Indoctrination of new MSMS members. This project, recommended by the Secretary in his Annual Report to The Council last January, is still under study as a state and/or a local medical society activity.

9. "Golden Goose." This plan of state-wide organization, originally submitted to MSMS by the Secretary, has resulted in a whirlwind of activity and meetings covering all parts of Michigan. The true story of utilization of Blue Cross-Blue Shield has been presented to county medical societies and to hospital staffs. Facts behind the story were garnered by the Advisory Committee to Michigan Hospital Service, under the Chairmanship of W. S. Reveno, M.D., Detroit, which has been one of our most hard-working Committees. The Executive Committee placed upon its minutes a vote of high thanks to the members of this Committee and also to those other doctors of medicine, not members of the Committee, who presented the many and effective Golden Goose talks throughout the State. Blue Cross-Blue Shield are among the greatest modern assets of the practitioner of medicine who must be diligent in conserving these valuable service programs and fighting faulty use of them.

A project of the Advisory Committee to Michigan Hospital Service is a Question and Answer booklet, with explanations of the many queries aired at Golden Goose meetings, as well as a compilation of recommendations to correct over-utilization; this booklet will be presented to the MSMS House of Delegates at the 1954 Session, for consideration.

The earnest and constant help of all MSMS members in the "Golden Goose" campaign is urgently requested. The existence of *voluntary* pre-payment plans and the present high quality of medical practice must be com-

plementary; if the former dies, the latter may lapse into a compulsory and deteriorated form of practice.

A recommendation on this subject follows.

10. Organization among the fifty-five component county medical societies, covering all of Michigan's eighty-three counties, is being maintained to a satisfactory degree. The scientific side of medicine in Michigan, especially on the local level, is at an all-time high.

Public Relations

The public relations of the MSMS might be likened to a large reservoir, a very valuable reservoir of friendship from which the profession may draw as particular needs for support arise. In 1953-54 we have, on occasion, drawn from that reservoir for the help needed, and we have refilled the reservoir by actions which have held old friends and brought us new ones.

Labelling the PR results accomplished, they resolve into (1) development; (2) leadership; (3) legislation; and, (4) media. Each of these categories has resulted in winning friends for medicine.

Development: County medical societies have needed and asked for specific PR projects they could carry out in their respective communities; MSMS has given them outlines of 26 such projects from which they might choose the projects most needed and adaptable to their areas (brochure "Winning Friends for Medicine"). Each project is complete with objective, strategy, planning, organization and follow-through. Incorporated in these outlines has been the services available to these societies from MSMS.

To bring these projects to the attention of county medical societies, this brochure was distributed at the County Secretaries-Public Relations Conference, at a meeting of the executive secretaries of county medical societies on Feb. 10, 1954, and was followed up with visits to county medical society PR personnel by the MSMS Field Secretaries. The resulting benefits to the individual doctor, to the county medical society, and to the MSMS are not easily assayed. But it is patent that for the first time (other than during specific campaigns such as the Anti-Socialized Medicine fight and later the Good Citizenship Campaign of 1952) there has been a cohesive PR movement forward, toward meeting the many PR problems of the medical profession, in which the work of each county medical society has been coordinated with other county medical societies and with the MSMS.

Leadership: The MSMS recognizes that it cannot be an isolationist among other units of the medical profession, or other professions, or even lay organizations. It has accepted its responsibility for co-operation and PR leadership by consistent contributions made by MSMS representatives.

These could be summed up on a national level as:— advice and assistance to the AMA through participation in AMA PR institutes and conferences and membership on the AMA PR Advisory Committee; participation in national public conferences and professional relations conferences of Blue Shield and with other groups through the PR Society of America; assistance to other state medical associations and to Canadian medical organizations.

In Michigan the support given the Michigan Health Council and the Michigan Rural Health Conference provided us with good PR contact with a multitude of statewide organizations and was responsible for the valuable M.D. placement program that is doing much to gain good relationships with doctorless communities. In addition we have helped to organize where organization was needed. MSMS greatly assisted the organization of the Michigan Association for Epilepsy so that now nearly all groups interested in that subject are under one general organization that is medically directed. Our work in adult education successfully assisted the organization of the Adult Education Association of Michigan. Our advices assisted in a public relations fashion the many organizations referred to elsewhere in this report and cemented good will with those groups.

Within our own orbit, the Woman's Auxiliary and the Michigan State Medical Assistants Society have been given substantial assistance and have responded with good service in our behalf.

All of these representations and contacts have resulted in friendships that are invaluable to our life as a profession and our success as members of that profession.

Legislation: Although legislation is treated elsewhere, it is unfair to fail to note that the lawmakers in the halls of the State and National Capitols react to the climate of public opinion respecting the doctors and their work. Thus the value of friendships developed by our PR program should not be overlooked in this regard. Further the research done on such subjects as compulsory disability insurance, hospital licensing, civil defense, and even milk fortification has stood us in good stead during legislative sessions.

These protections accorded the people have been more than worthy of continued support for efforts expended.

Media: Usually this category is thought of as the sum and substance of PR. Truly it is an important part but only *one*. Elsewhere is available an item by item account of the accomplishments in communication media (see Public Relations Committee's Annual Report). Suffice it here to say that publicity given the Annual Session, the Michigan Clinical Institute, the Foremost Family Physician, and the Beaumont Memorial has been excellent. Our PR exhibits at the State Fair and the medical meetings have ranked in public reaction with the better commercial exhibitions. We have had wide distribution of some 10 different pamphlets with our "Medical Associates" brochure still leading the list of publications in public interest. Incidentally, this brochure and the accompanying effort has done much to increase the supply of training facilities and courses for these valuable aides to doctors of medicine.

During 1953-54 we have noted, sometimes with only a casual glance as if it were to be expected, the continuation of year-round, five-day-a-week, medical radio and television programs aggregating thousands of hours of air time, and with not one cent spent by MSMS for the time itself!

Summary: All of these fine results, which in their aggregate far overbalance the minor irritations we have encountered, will prove of little avail, however, unless the ideals of good public relations are given enthusiastic, honest recognition and support by our members. These ideals are not at variance with good medicine; on the contrary they are part and parcel of the art of medicine and deserve the continued faith and confidence of our membership. The best PR for the medical profession begins and ends in the physician's own office.

Woman's Auxiliary

Under the presidency of Mrs. Walter S. Stinson of Bay City, the Woman's Auxiliary has been of immeasurable help to MSMS in many fields, particularly in legislative problems and public relations.

Membership has been strengthened during the past year at the county level, and progress has been made in securing members-at-large throughout unorganized districts.

Officers and leaders of the Woman's Auxiliary have participated in and contributed to MSMS conferences and activities, and were well represented at the Annual County Secretaries-Public Relations Conference in January.

During the Legislative session, activities of Auxiliary members were outstanding, and the Auxiliary undertook a "Get Out the Vote" program and other intensive work as part of the "Good Citizenship Campaign for 1954" preceding the primary elections and currently, the gen-

eral election. Other activities included numerous civic and health programs within local communities.

MSMS is continually proud of and grateful for the work of the Woman's Auxiliary and its individual members at every level, state, county and local.

Michigan State Medical Assistants Society

The MSMAS numbers over 600 members. Projects of the 11 local chapters have included service to their county medical society; working toward the development of new courses for medical assistants patterned after the successful program at Highland Park Junior College; financing medical assistant students; and various locally inspired tasks.

Adult education courses for medical assistants were developed in several communities with the co-operation of the county medical societies and with the guidance of the MSMAS.

In addition, a pilot experiment for a Placement Bureau for medical assistants was set up in Ingham County. A nationwide survey revealed that Michigan is the leader in the development of medical assistant organizations with only three states having state organizations (Michigan included) with 9 others organized on a county basis.

Contacts with Governmental Agencies

Contacts with federal, state, and local governmental agencies continue to be an important and time-consuming activity of MSMS. Chief among these contacts during the past year were:

1. Michigan Day in Washington, D. C. Again, MSMS representatives were dispatched to Washington, D. C., on April 27, 1954, pursuant to instruction of the 1953 House of Delegates. These men made personal contacts with our friends in the Capitol, with good will continually increasing.

A recommendation on this subject follows.

2. The usual number of contacts were maintained during the past year with the Michigan Department of Health, Michigan State Board of Registration in Medicine, University of Michigan, Wayne University, State Board of Alcoholism, Probate Judges Association, Michigan Crippled Children Commission, Michigan Social Welfare Commission, Michigan Insurance Department, Michigan Department of Public Instruction, Michigan Advisory Hospital Council, Governor's Commission on Problems of the Aging, Veterans Trust Fund, Michigan Civil Defense, the Governor's Office concerning appointments to various boards and committees touching the practice of medicine, the Michigan Mental Health Commission and with the U. S. Congress (particularly in connection with H.R. 7341, the Administration's bill to expand the Hill-Burton program: John R. Rodger, M.D., Bellaire, attended two hearings on this proposal as MSMS representative.)

3. Michigan Attorney General. Several Opinions emanating in recent years from the Michigan Attorney General's office appear to favor the cant of healers other than doctors of medicine. In the most recent Opinion (No. 1724), he opined that osteopaths are qualified by statute and training to certify in Probate Court as to whether or not persons are insane, feeble minded, or mentally diseased. The statute requires the certification of two "physicians" in such cases. Should the Court appoint a doctor of medicine and an osteopath in the same case, an ethical question is suggested. If the M.D. makes his examination and certification under such circumstances, has he violated the principle of non-collaboration with osteopaths and cultists? The Judicial Council of the AMA has not yet ruled on this matter.

Contacts with Voluntary Agencies and Organizations

1. Blue Shield, Michigan Medical Service enjoyed amazing success in the past year . . . its 14th of existence. Up-to-date financial reports of Michigan Medical Service will be submitted to its Members at their Annual Meeting on Tuesday, September 28, 1954, at 2:00 p.m. in the new headquarters of Michigan Medical Service, 441 E. Jefferson, Detroit (following the Blue Shield luncheon also at the headquarters). Michigan Medical Service President R. L. Novy, M.D., Detroit, urges all MSMS Delegates to be present at this Session since Delegates are Members of Michigan Medical Service and a quorum is necessary for the conduct of business.

2. Uniform claim forms for health and accident insurance. A report on progress from the Health Insurance Council was presented to the Executive Committee of The Council on April 1. A digest was published in JMSMS and also is attached as addendum to this Report (see addendum).

3. Continued friendly association exists between MSMS and Blue Cross, the American Cancer Society, Michigan Heart Association, Michigan Federation of Women's Clubs, Girls Town Fund, Michigan Health Council, Michigan Foundation for Medical and Health Education, Inc., the new Michigan Cancer Co-ordinating Committee, American Medical Association, Michigan's Demonstration Project for Severely Mentally Retarded, State Bar of Michigan, Michigan Health Officers Association, Michigan Tuberculosis Association, Michigan Hospital Association, United Health and Welfare Fund and the United Community Services, the three state nurse associations and the four veterans organizations of Michigan, the United Cerebral Palsy Association, the recently-created Michigan Association of Epilepsy, Inc., the Michigan State Dental Association and the Michigan State Pharmaceutical Association.

4. Too numerous to mention are the meetings of voluntary agencies and organizations covered, upon invitation, by official MSMS representatives; The Council expresses thanks to all MSMS members who sacrificed valuable time and effort to attend these conferences in behalf of the State Society.

Society Home

The three-year anniversary of the MSMS home at 606 Townsend Street, Lansing, occurred on July 27, 1954. The investment is fully justified in higher efficiency of the Executive Staff and in increasing value of the real estate, thanks to the erection of notable buildings in the area.

The renovation program during the past year included removal of the old porch and installation of a modern entry (with hand-carved caduceus turned by Councilor Wm. M. LeFevre, M.D., Muskegon); new black-topped driveway and parking lot; landscaping; exterior trim painted and eavestrough downspouts repaired. The only remaining project is the furnishing of the reception room, now under way.

The membership may well be proud of its Society home. All doctors of medicine and their ladies are invited to visit the headquarters of the Michigan State Medical Society—a dignified bee-hive of organizational activity in behalf of Michigan's M.D.'s.

Beaumont Memorial Restoration

The Dedication of the Beaumont Memorial occurred July 17, 1954—a great event marking (a) the epochal discovery made by William Beaumont, M.D., on Mackinac Island in 1822 and (b) the generosity of Michigan's doctors of medicine in contributing thousands of dollars to erect this architectural gem as a Memorial to one of the great physiologists of all time. The Beaumont Memorial will stand for generations as a symbol to the honor and respect which Michigan medical men pay to their Scientific Great.

High thanks are due and payable to the hard-working Beaumont Memorial Committee, especially to its zealous Chairman, Otto O. Beck, M.D., of Birmingham, whose private practice of medicine suffered considerably during the past year due to his tireless attention to the work of the Beaumont Memorial and the July 17 Dedication.

Thanks also are extended to the Wayne County Medical Society's Beaumont Memorial Committee, headed by F. P. Rhoades, M.D., Detroit, for its work in stimulating contributions to the Beaumont Memorial Fund.

Additional monies are needed to defray costs of the authentic 1822 furnishings which have been secured mainly in Montreal, and also to purchase small parcels of land adjoining the Beaumont Memorial to give it proper setting.

A recommendation on this subject follows.

Committees

A total of ninety-three meetings of Committees of the Michigan State Medical Society and of The Council were held during the past year (up to September 1, 1954). The worthy progress of your State Society continues to be due in the main to these active groups; their Annual Reports are commended to the careful perusal and consideration of all members. The Council is grateful to the Chairmen and members of all Committees for their tangible contributions of valuable time and effort given in behalf of *all* the medical men and the public of Michigan.

Especially active during the past year were the following Committees: the Legislative Committee; the Mental Health Committee; Rheumatic Fever Control Committee; Arbitration Committee; Emergency Medical Service Committee; Child Welfare Committee; Maternal Health Committee; Geriatrics Committee; Advisory Committee to Michigan Hospital Service (see paragraph under "Organiaztion"); Tuberculosis Control Committee; and the Subcommittee on Intern Training of the Postgraduate Medical Education Committee which adopted an enlightening report, published in JMSMS.

Annual Reports of Committees of The Council

Formerly, the Annual Reports of Committees of The Council were published in the Handbook as individual reports; this year, to save time of House of Delegates' Reference Committees, they are being integrated into the Annual Report of The Council. These reports follow:

1. *Medical Advisory Committee to Michigan Hospital Service.*—In the seven meetings held by this Committee since October, 1953, this Committee has (1) prepared charts and slides to aid in the discussions with the medical profession; (2) set up a plan for publicizing proper utilization of pre-payment services; (3) arranged for Councilors to address hospital staff and county society meetings on this subject; (4) put on a Golden Goose breakfast and an exhibit at the Michigan Clinical Institute last March; (5) prepared editorial material for THE JOURNAL of the Michigan State Medical Society; (6) continued to press for the appointment of hospital staff committees on proper utilization in every community; and (7) is preparing a question-and-answer pamphlet on proper utilization.

2. *Medical Procurement Advisory Committee.*—The Medical Procurement Advisory Committee held no meetings during the past year since no problems arose which called for a meeting and no references were made by officers or committees of the Society which required consideration.

However, various members of the Committee have served in various capacities in medical procurement. Dr. Grover C. Penberthy continues as Chairman of the Voluntary Advisory Committee to the Selective Service System and your Chairman, C. I. Owen, M.D., as Medical Advisor to the Director of Selective Service.

3. *Committee on Arbitration.*—The Committee on Arbitration attempts to advise fair, equitable and uniform fees for certain medical services rendered to Governmental Agencies. In the first six months of the 1953-54 year, the Committee has had two meetings and reviewed eighteen (18) cases. Judging from past experience, the Committee will have about two more formal meetings and review about forty (40) cases during the year.

4. *Special Committee to Meet With Michigan Social Welfare Commission.*—As in previous years, your Committee has formed an integral part of a larger advisory committee and has met on four separate occasions to discuss mutual problems. On November 19, 1953, the Committee made a thorough and complete study of Medical and Health Facilities at the Girls State Vocational School in Adrian, and because of this, a much-needed renovating and revision of the existing plan was made. The other major meeting was on April 22, 1954, when we met in Ann Arbor with representatives of the Department of Health, Education and Welfare, to adopt definitions of the various categories acceptable to the State and Federal Commissions.

Again, the Social Welfare Commission has thanked the members of the Michigan State Medical Society for their great help and have asked that this liaison be continued.

5. *Committee on Study of Basic Science Act.*—At the request of the Governor, the Basic Science Study Committee participated in a conference on a proposed amendment to the Basic Science Law. This conference took place in the early part of January and later the proposed amendment was adopted by the Sixty-seventh Legislature as Senate Bill No. 1082 and signed by the Governor. The essence of this amendment permits a waiver of the Basic Science examination in this state and allows the Basic Science Board to grant a certificate providing the applicant has passed an examination in the Basic Sciences in one other state or territory, providing the examination is given by the official Basic Science Board of that State, and providing that the examination and passing requirements were substantially equal to those required by the Basic Science Board of Michigan.

6. *Permanent Conference Committee (with Michigan Hospital Association, Michigan League for Nursing and Michigan State Nurses Association).*—The Permanent Conference Committee has had several interesting and satisfactory meetings co-operating with representatives of the Michigan Hospital Association, the Michigan League for Nursing and the Michigan State Nurses Association. A great many points of common interest have been thoroughly discussed and explored with mutual satisfaction to all.

This combined Committee has been outstanding in its discussion of common problems and its goal has been approved in several states.

7. *Committee on Blood Banks.*—No meetings held during past year. No problems were referred to the Committee on Blood Banks. Local problems were solved locally.

8. *Committee to Meet with University of Michigan.* Your Committee was presented with only one problem during the past year—concerning discharge of patients from the University of Michigan Hospital. This matter was discussed informally and verbally with the University of Michigan authorities, no official meeting of the Committee being held. The subject is still under consideration.

It is felt that this Committee should be continued so that the unfinished business before the Committee, and any new business that may arise in the future, can be on the agenda for a meeting of this liaison committee to be held shortly after the MSMS Annual Session.

9. *Committee on Courses on Medical Economics and Ethics.*—Your Committee on Courses on Medical Economics and Ethics held no stated meeting during the year but there was considerable discussion both by mail and telephone. In addition an attempt was made to hold a meeting at the time of the state meeting in Grand Rapids but it was impossible to get all of the men together. Consequently, the Chairman met with each member of the Committee separately. At this time the titles for the lectures for the coming year were de-

cided on, and the Chairman carried out the remainder of the work on a local level.

The following is a list of the lectures given:

Oct. 28
"Fundamentals of Medical Public Relations"
R. W. Tweed, M.D.
Nov. 18
"Practice in a Small Community"
J. R. Rodger, M.D.
Dec. 9
"The Need for Public Relations Program"
H. W. Brenneman
Jan. 13
"Public Relations at the Office Level"
R. W. Teed, M.D.
Feb. 10
"History and Philosophy of the Michigan Medical Service"
R. L. Novy, M.D.
Feb. 17
"County Society Activity in Relation to the Physician"
R. A. Johnson, M.D.
Feb. 24
"The Health Department and You"
O. D. Stryker, M.D.
Mar. 3
"Medical Records from the Standpoint of the Physician"
R. W. Teed, M.D.
Mar. 17
Two Movies: (a) "A Citizen Participates"; (b) "The Picture of Health"
Mar. 24
"Faulty Utilization of Voluntary Insurance"
L. Fernald Foster, M.D.
Apr. 28
"The Relation of the Physician to the Legislature"
L. A. Drolett, M.D.
May 12
A Movie: "To Save Your Life"
May 19
"Medical Organizations and the Physician"
E. A. Osius, M.D.

You will note that the Chairman appeared on several of the lectures but all except the first were fill-ins due to inability of the stated speaker to appear at the last moment.

10. *Special Committee With American Legion.*—At the request of the Commander of the Michigan Department of the American Legion, a meeting was held on March 12, 1954. The basis for this meeting was a series of inaccurate statements published in the *Michigan Legionnaire* in preceding months. Discussion largely centered around the stupendous hospital program of the Veterans' Administration and the hospitalization of the non-service connected veteran who, except for the identification as a veteran, was generally able to assume the responsibility for hospitalization under other auspices himself. No conclusions were asked for or reached, but a friendly relationship was established. The position of the 1953 MSMS House of Delegates was endorsed by several of the guests.

11. *Hospital Relations Committee.*—The work of this Committee was accomplished December 13, 1953. At this time the Rules and Minimum Standards for Michigan Hospitals published by Dr. A. E. Heustis, State Health Commissioner, were considered. At the present time there are four different acts in this State having to do with hospital inspection. It is Dr. Heustis' plan to have one set of rules and regulations covering these acts. The acts are No. 299, P.A. 1947; No. 231, P.A. 1951; No. 197, P.A. 1952 and No. 227, P.A. 1953. It is with this latter act, namely, 227, P.A. 1953, that we are mainly concerned. Inasmuch as the Michigan State Medical Society's Hospital Relations Committee feels that the approval presently granted to Michigan hospitals by the Joint Accreditation Committee of the American Medical Association and other groups is of the highest value to the people of Michigan, the Committee went on record against complete hospital licensing and against any change in Act 227 which could well lead to the complete licensing of all hospitals. It was the consensus of the Committee that the prerogatives of the State Health Commissioner end where those of the practicing doctor of medicine begins. The Health Commissioner's policies for patient care in hospitals covered by Act 227 may be the subject for review and discussion by the medical staffs of the hospitals. The Section IB Hospital Committee or Board of Directors (as provided under the minimum rules and standards for the hospitals) was considered at length. Under the submitted rules and minimum standards, the State Commissioner of Health alone would appoint all members. Our Committee believes that the concerned organizations, namely, the Michigan State Medical Society, the hospital administrators, the State Nurses Association, et cetera, should submit a list of names and from these names the State Health Commissioner could choose members for the Hospital Committee. Detailed consideration of sections of the entire act were studied and certain suggestions made where it was felt that the practice of medicine was interfered with.

12. *Committee to Co-operate with Michigan Health Council re Periodic Health Appraisal.*—No meetings of this Committee were held during the past year. Several conferences were held between the Chairman and the Public Relations Department of the Michigan State Medical Society.

13. *Rural Medical Service Committee.*—The Committee on Rural Medical Service was concerned principally with the "M.D. Placement Program." The Committee acts in an advisory capacity to the Michigan Health Council which is conducting the Program. Much progress has been made in the technique of guiding prospective physicians to critically short areas, but the demand still is far above the supply. The Committee feels that the availability of physicians for rural areas is inevitably linked to the number of medical students from rural communities. Scholarships, preceptorships, externe-training, and a workable Basic Science Law—all these are closely related to the supply of M.D.'s for Michigan.

The Committee is indebted to Dean G. H. Scott, Ph.D., of Wayne, and Assistant Dean W. L. Whitaker of the University of Michigan for their counsel.

14. *Liaison Committee With Michigan Veterans' Organizations.*—No Committee meeting was held. At the December 16, 1953, meeting of the MSMS Executive Committee, service officers of the Veterans of Foreign Wars, American Legion and Amvets brought messages from their organizations to the MSMS to thank MSMS for its co-operation and understanding of the veterans' problems.

15. *Committee on Emergency Medical Service.*—The Emergency Medical Service Committee met four times during the year 1953-54. Two meetings were held in Detroit and two were held in Lansing.

The Medical Activators joined with the Emergency Medical Service Committee in the last two meetings. The Committee briefed the members and activators on the present status of the atomic bomb and the hydrogen bomb. Talks were given by General Daugherty, Drs. Lichter, Anderson, Hague, Sprunk. Mr. John Griffin (representing General Maitland), Mr. William Brinkman, Mr. Paul Schaffer and Mr. Peter McGillivray of the Wayne Civil Defense Department.

At the May meeting the film "Operation Ivy" was shown.

At the February meeting, after much discussion between members of the Committee and Activators, the Committee adopted the Medical Civil Defense Plan for the State of Michigan as prepared by Dr. A. G. Baker and Mr. John Griffin.

At present the Activators are organizing their areas and by fall an active medical organization is expected.

16. *Liaison Committee With Michigan State Pharmaceutical Association.*—No problems were presented to this Committee and no meetings were held. The liaison between the Michigan State Medical Society and the Michigan State Pharmaceutical Association is excellent, with constant exchange of ideas, information and contacts between the administrative personnel of both associations.

17. *Committee on Awards.*—During the past year, no special awards were recommended by the Committee. However, the Committee is considering and investigating several suggestions for awards and will make its recommendations to The Council and the House of Delegates in September, when current studies are completed.

Matters Referred to the Council by the 1953 House of Delegates

1. *MSMS Health and Accident Insurance Program.*—The many problems inherent in inaugurating a new program of this type were showered upon The Council and its Executive Committee after the health and accident plan was approved by the 1953 House of Delegates. Clarification of the questions necessitated discussion of the program at practically every meeting of The Council and of its Executive Committee since September, 1953.

A report to September 27, 1954, will be presented in the Supplemental Report of The Council. In addition, a representative of the Provident Life and Accident Insurance Company will be present in Detroit on September 27-28, to be available to the House of Delegates and its Reference Committee to impart information and to answer any questions concerning the MSMS program of insurance protection.

2. *Resolution re Public Relations Funds.*—This matter was referred by The Council to the Public Relations Committee for study and service. Subsequently, the Public Relations Committee reported two major revisions in its activity. First, it developed budgets based on three major classifications: Public Education, Public Service, and Professional Relations. The budgets now reflect realistically the work done, not only by the Public Relations Committee but also by the related committees that use public relations funds for purposes having definite public relations effects but which are not commonly known to be public relations activities per se. (Example: Rural Health, Legislation, Woman's Auxiliary, Adult Education, et cetera).

The second revision was the preparation of a series of PR projects especially designed for county medical societies. From this series, each county medical society could choose the activities needed by or peculiarly suited to it. Each project carried with it services available from MSMS to the county medical societies as well as suggestions to the local societies for the development of each selected project. Following the presentation of these projects (contained in the brochure "Winning Friends for Medicine," introduced on January 31 at the County Secretaries-Public Relations Conference), MSMS Field Secretaries met with county medical society representatives and encouraged the selection of projects most suitable to the county societies, offering assistance on the part of MSMS of the sort most desired by them.

In addition, the Public Relations Committee carried on those statewide activities in all of the projects which could be done best on a statewide basis. (See section on Public Relations.)

3. *Resolution re Lowering of MSMS Dues.*—This matter was referred to the Finance Committee of The Council which after thorough study recommended to The Council in January, 1954, "that the MSMS dues be not reduced because the Society's reserves are not sufficient to meet a serious unforeseen emergency; the Finance Committee agrees with and concurs in the well-known and safe economic concept that good business programming and planning demands at least two years' reserve on hand for emergencies; finally, the Finance Committee recommends that aid be considered for any component county medical society in Michigan which is faced with a problem that has an impact on the doctors of medicine of the State as a whole, upon request from said county medical society." Subsequently this report was approved by the Reference Committee to which it was referred and then by The Council as a whole at its Annual Meeting of January 29-30, 1954.

(See Item 2 above as well as the Public Relations section.)

4. *Resolution re American College of Surgeons.*—This resolution had to do with aspects of fee splitting and was referred by The Council to MSMS Legal Counsel for opinion. Mr. J. Joseph Herbert presented an opinion, digest of which is as follows: In Michigan, the splitting of fees does frustrate a sharply defined state policy evidenced by a governmental declaration prescribing particular types of conduct. Our state legislature has expressed itself by enacting a statute making it a criminal offense for a physician or surgeon to divide his fees with any other physician or surgeon or person who calls him into consultation or sends patients to him for treatment or operation. (Michigan Statutes Annotated 28.683). From the foregoing, it is evident that the action by the American College of Surgeons will have no legal effect upon the right of Michigan doctors to deduct split-fees as a business expense deduction, for the simple reason that the Michigan statute and the established policy of the Bureau of Internal Revenue already make such split-fees non-deductible.

5. *Motion re Study of Fees in Blue Shield for Surgical Assistants.*—Since The Council ascertained that Michigan Medical Service was making a survey of decisions in other states re the payment of fees for surgical assistants in Blue Shield cases, The Council communicated with Michigan Medical Service, which advised that its attorneys (Butzel, Levin, Winston & Quint) rendered an opinion on this question. The conclusions in said document are summarized as follows:

(1) Any plan for splitting or apportionment of surgeons' fees is illegal under the laws of Michigan and cannot be adopted by your organization.

(2) A plan whereby a surgeon received a lesser fee because he rendered less service would not entail splitting or apportionment of fees.

(3) A plan whereby another physician received compensation for services which he rendered would not entail splitting or apporitionment.

(4) It is to be doubted whether it is possible, as a practical matter, to formulate such a plan.

List of Blue Shield Plans where assistants' fees were paid in some form or another as of March 31, 1954, is attached (addendum). Michigan Medical Service understands that some of these plans are changing the bases indicated on the recap and other Plans are eliminating the fees entirely.

6. *Resolution re Courses in Medical Ethics in Michigan Medical Schools.*—On this subject, The Council communicated with the Deans of the two medical schools in Michigan.

Dean A. C. Furstenberg, M.D., University of Michigan Medical School, Ann Arbor, answered on November 3, 1953: "For many years we have had members of the Medical Faculty lecture to our students on Medical Ethics. Moreover, we have solicited the help of R. Wallace Teed, M.D., and he has been very gracious in assisting the President of our Senior Class to organize lectures in Medical Economics and Medical Ethics. In this connection, representatives of the Michigan State Medical Society have been kind enough to participate in this program. We are in contsant touch with Dr. Teed, and I am sure that we count on his further interest and assistance."

Dean G. H. Scott, Ph.D., Wayne University College of Medicine, Detroit, wrote on November 5, 1953: "Thank you for your letter in which you enclose a copy of a resolution passed by the House of Delegates regarding the teaching of ethics in our medical school. I will be delighted to discuss this whole matter with you at your convenience."

7. *Resolution re Reporting Venereal Disease.*—This resolution urged physicians to be diligent in the prompt reporting of venereal disease but recommended no change be made at the present time in the reporting requirements of the law.

Despite the recommendation of the 1953 House of Delegates, the Michigan Department of Health introduced a bill in the 1954 Michigan Legislature (H.B. 299) to make compulsory the reporting of positive laboratory tests for communicable diseases, including venereal diseases, by registered laboratories. This action necessitated appearances before a Legislative committee by representatives of the Michigan Pathological Society et al; the bill was approved by the House of Representatives but did not emerge from the Senate Committee.

This resolution also recommended that a joint study commission be established, to advise The Council of any changes in the law which might be recommended to the Legislature. Two representatives were invited from each of the following: Michigan Health Officers Association, MSMS Council, Michigan Pathological Society, Michigan Health Department and MSMS Committee on Venereal Disease Control. This joint commission met on March 18, 1954, and refused to approve H.B. 229 as drafted by the State Health Commissioner. Amendments were proposed with members differing on the key issue: whether a laboratory report should be considered as a report of a case; the majority of those members present insisted that diagnosis and reporting of a communicable disease are the responsibility of the patient's physician.

8. *Resolution re Veterans Care.*—This was referred to the six Delegates from this State to the AMA House of Delegates; this subject was on the agenda of the AMA House of Delegates in June, 1954. The results will be contained in the report to be presented by the Chairman of our AMA Delegation, Wm. A. Hyland, M.D.

In like manner, Dr. Hyland's report will present the action of the June, 1954, AMA House of Delegates on the teaching of osteopaths, the subject of a resolution presented to the 1953 MSMS House of Delegates.

9. *Resolution re Amendment to Basic Science Act.*—This amendment was considered by the Legislative Committee which submitted it to the 1954 Michigan Legislature. The Council is happy to advise that the Legislature amended the Basic Science Act essentially as the 1953 House of Delegates recommended.

With the removal by the Legislature of a major stumbling block, Michigan now can look forward to seeing its Basic Science Law function as originally intended. With new members and enlightened administration of the law, the Basic Science Board already has reduced the backlog of applicants which had piled up during the months following the 1953 "bottleneck" Opinion rendered by the Michigan Attorney General. Now the Basic Science Law can protect Michigan from unqualified practitioners; with more states recognized for waiver of examination, additional doctors of medicine will enter practice in this State—the desire of the Michigan State Medical Society as enunciated by its 1953 House of Delegates.

10. *Resolution re Study of Mental Health Problems.*—During the past year, The Council and the MSMS Mental Health Committee have been extremely cognizant of the current and anticipated problems in mental health. During the Legislative session of 1954, representatives of the Mental Health Committee, particularly Chairman H. W. Bird, M.D., Detroit, were invited by legislators to advise on mental health problems and their solution. One major accomplishment was passage of legislation to establish Hawthorne Center at Northville, for the care of mentally disturbed children, a project endorsed by the Michigan medical profession.

Needed Amendments to By-Laws

The 1953 House of Delegates amended the By-Laws in Chapter 5, Section 6 re Life Members making a candidate eligible if his dues were paid for the previous year. This brings up two questions: (a) should not the same provision be inserted in Sections 3, 4, 5 of Chapter 5 re Associate Members, Retired Members and Non-Resident Members?; (b) should not a further amendment to the By-Laws be inserted in Chapter 15, Section 2, as this Section states: "Any member in arrears after April 1 of each official year shall stand suspended, et cetera"; this undoubtedly was not meant by the 1953 House of Delegates to apply to those members eligible and being considered by county medical societies for special membership (such as Life, Retired, et cetera) at the Annual Session which meets almost six months *after* the dues' deadline date of April 1.

The Council has requested the Secretary to offer his services to the House of Delegates Committee on Constitution and By-Laws in solving these membership problems.

A recommendation on this subject follows.

Recommendations

1. That all members of the Michigan State Medical Society be urged by the House of Delegates to give conscientious attention to proper utilization of Blue Cross-Blue Shield services to the end that these voluntary facilities remain solvent and helpful to our patients; that all members carefully study the Question-and-Answer brochure to be released by MSMS through its Advisory Committee to Michigan Hospital Service after its approval by the 1954 House of Delegates. Our system of voluntary medical-hospital service will survive only with the strong support of every medical man.

2. That The Council be authorized to send MSMS representatives to Washington, D. C., in 1955, on the occasion of the Annual Michigan Day.

3. That contributions to the Beaumont Memorial Restoration Fund—by *every individual member* of the Michigan State Medical Society—be urgently recommended by the House of Delegates. Only 2327 M.D.'s (42.1 per cent of MSMS membership) have contributed to July 1, 1954; every one of the 5,530 members of the State Society should take pride in contributing, if

but just a little, to the Beaumont Memorial which represents the best type of public relations for the medical profession of this State.

4. That the House of Delegates give consideration to amending the By-Laws so that current special membership problems are solved.

Respectfully submitted,

WILLIAM BROMME, M.D., *Chairman*
H. B. ZEMMER, M.D., *Vice Chairman*
ARCH WALLS, M.D.
R. S. BREAKEY, M.D.
G. W. SLAGLE, M.D.
RALPH W. SHOOK, M.D.
J. D. MILLER, M.D.
H. H. HISCOCK, M.D.
L. C. HARVIE, M.D.
G. B. SALTONSTALL, M.D.
F. H. DRUMMOND, M.D.
W. M. LEFEVRE, M.D.
B. T. MONTGOMERY, M.D.
W. S. JONES, M.D.
B. M. HARRIS, M.D.
D. BRUCE WILEY, M.D.
W. D. BARRETT, M.D.
W. B. HARM, M.D.
J. E. LIVESAY, M.D., *Speaker*
K. H. JOHNSON, M.D. *Vice Speaker*
L. W. HULL, M.D., *President*
R. H. BAKER, M.D., *President-Elect*
L. FERNALD FOSTER, M.D., *Secretary*
W. A. HYLAND, M.D., *Treasurer*
R. J. HUBBEL, *M.D., Immediate Past President*

ADDENDUM

Uniform Claim Forms

More than 100 million persons in the United States now are protected by one or more kinds of health insurance*, according to the latest estimates. Of this number more than 50 million are covered by the insurance companies. This compares with only about 20 million persons covered by insurance companies as recently as 1947.

This heartening development naturally has resulted in creation of new problems, one of the chief of which is how to perfect a set of uniform claim forms and get them into general use. The fact that more than 10 million accident and health claims are handled yearly emphasizes the importance of this problem.

The forms used to support these claims in surgical and medical insurance alone lead to almost $300,000,000 yearly, finding its way into medical care channels. Because new policyholders are being insured daily, the number of forms receiving attention from doctors in the aggregate will not diminish, but there is real hope that the problem of filling out these forms can be made less burdensome.

The health insurance industry has worked for a considerable period to arrive at uniformity of claim forms used to obtain needed information from physicians, hospitals and clinics. An extensive, all-industry effort toward the goal of uniformity of language and brevity and simplicity, began in April, 1953, under the leadership of the Health Insurance Council. The membership of this Council consists of nine associations interested in the health insurance field. More than 600 insurance companies are affiliated with one or more of the nine associations. The companies handle more than 85 per cent

*The expression "health insurance" in this memorandum refers both to health and accident insurance.

List of Blue Shield Plans Assistant Fees Paid

(Code: H—Hospital; OP—Out-Patient; O—Office; HO—Home)

	No. Subs.	*Where Paid*
Colorado Med. Serv., Inc., Denver	392,510	H-OP-O On most major procedures.
California Physicians Serv., San Francisco	630,982	H-OP-O-HO 20.00 first two hours, 7.50 each hour or fraction.
Assoc. Hosp. Serv. of Maine, Portland	98,835	H If rendered by participating physician.
Maryland Med. Serv., Inc. Baltimore	224,019	H 15.00 maximum—only in hospitals outside Baltimore, with neither resident nor house staff.
Mass. Med Service	1,597,392	H-OP-O-HO Deducts 15% of surgeon's fee. Deduction made for procedures of $75.00 or more (Plan A) and procedures of $100.00 or more (Plan B).
Minn. Med. Serv., Inc., Saint Paul	628,679	H-OP-O-HO Assistance in major surgical cases (Plan A) over $75.00; Plan B—over $100.00).
N. H.-Vermont Phys. Serv., Concord	277,871	H-OP-O-HO $20.00 maximum per disability.
Coos Bay Hosp. Assoc., Oregon	13,340	H-OP-O When recommended by physician.
Pacific Hosp. Assoc., Eugene, Oregon	10,915	H When reasonably necessary in cases of sickness or injury.
Klamath Med. Serv. Bureau, Klamath Falls, Oregon	9,194	H-OP-O When requested by attending physician.
Oregon Phys. Service, Portland	119,463	H-OP-O-HO When rendered by co-operating physician.
Marion Co. Med. Serv., Inc., Fairmont, W. Va.	17,740	H When assistant is participating physician.
Surgical Care, Milwaukee	412,396	In accordance with amount instructed by doctors rendering service—not to exceed fee.
	4,433,336	

of the health insurance written by insurance companies in the United States.

The progressive development of health insurance resulted, of course, in an increasing variety of forms with differences in length and wording.

Recognition of the need to clarify the situation has been spearheaded by one of the Council's members, the International Claim Association. This is composed of personnel which constantly works and lives with claims problems.

The membership of the International Claim Association is highly representative of its field. It has made studies to find out what information is needed. In this endeavor it has had considerable help from various companies in its drafting of claim forms.

A special Committee on Uniform Claim Forms, created by the Health Insurance Council, intensified and broadened the industry's efforts about a year ago. This committee, working in co-operation with representatives of the various associations, is acting on behalf of all segments of the health insurance industry.

The program includes the preparing of satisfactory claim forms and helping to get them used on a nationwide basis.

A group hospital insurance uniform claim form was prepared about two years ago and now is in general use in many parts of the country.

Five attending physician's statement forms for use on claims under regular life and group life insurance have received broad company consideration and are now in final draft. Four of them are for disability—two initial and two continuing disability—and one for death claims. The fact that more than 85 per cent of the companies in the United States and Canada participating in a study of the forms have agreed to use them has demonstrated what can be accomplished in the way of a uniform claim forms program.

Additional forms are in preliminary draft form.

A program for arriving at a series of uniform claim forms involving more than 600 companies is a substantial undertaking. Much already has been accomplished, but still more time is needed to come up with the soundest answers. The importance of this project can be envisioned when one realizes that hundreds of insurance companies, each with its own versions of forms, run up the variations into very high figures.

One of the first requirements is to settle upon forms which are reasonably brief and simply and clearly worded, as well as being adequate from the standpoint of sound insurance principles and practices.

Naturally, the work on the final uniform claim forms will have the benefit of consultation with hospital and medical groups both at the national and local levels.

Numerous medical and hospital societies have shown interest in the uniform claim forms program. Some of the societies, which had been preparing or planning to prepare programs of their own, have voluntarily held up on their projects to await the results of the industry-wide proposals.

The committee is most appreciative of this because forms prepared locally would inevitably result in variations throughout the country and thus cause a certain amount of confusion. The problems are being approached from an all-industry and nationwide standpoint, with the realization that general uniformity in claim forms is highly desirable for everyone concerned.

The co-operation of physicians and hospitals as well as the insurance people is essential for the maximum success of this project. Also patience, tolerance, and determination to make a program work are necessary.

The Special Committee on Uniform Claim Forms is encouraged by the many inquiries about its program and the interest which is evidenced. Such interest is an encouraging sign that solutions to the difficult problems will be reached.

ANNUAL REPORT OF THE ETHICS COMMITTEE

1953-1954

The Ethics Committee of the Michigan State Medical Society has had several matters referred to it for consideration during the year. These matters have been reviewed by the Committee, and where indicated, recommendations have been made to The Council of the Michigan State Medical Society.

Respectfully submitted,

H. B. Barker, M.D., *Chairman*
W. L. Harrigan, M.D.
H. L. Morris, M.D.
E. A. Oakes, M.D.
H. W. Porter, M.D.
A. H. Price, M.D.
W. F. Strong, M.D.
M. R. Weed, M.D.

ANNUAL REPORT OF THE SCIENTIFIC RADIO COMMITTEE

1953-1954

During the year 1953-1954 a total of 40 scientific radio programs were prepared and presented by members of the Michigan State Medical Society and the faculties of the University of Michigan Medical School and Wayne University College of Medicine.

Topics for these talks have included the fields of pediatrics, psychiatry (adult and children's), cancer, dermatology, allergy, obstetrics and gynecology, internal medicine, endocrinology and metabolism, nutrition, urology, orthopedics, and occupational medicine.

The programs are not presented during the summer months, but will be resumed in the fall of this year. We shall be very glad to have members of the State Society volunteer to aid us in this public service program so that we may be assured of its successful continuation.

Respectfully submitted,

J. M. Sheldon, M.D., *Chairman*
C. B. Beeman, M.D.
J. H. Buell, M.D.
F. J. Kemp, M.D.
C. E. Lemen, M.D.
K. L. Swift, M.D.
R. W. Teed, M.D.
K. W. Toothaker, M.D.
E. C. Vonder Heide, M.D.

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE

1953-1954

The Beaumont Memorial Committee met five times during the past year, and in addition a meeting was held with the representatives of the Michigan Historical Society.

The Committee members made numerous visits to the Detroit Institute of Arts, the Detroit Historical Museum, and the Henry Ford Museum for information and guidance, especially in connection with furnishings for the Beaumont Memorial on Mackinac Island.

A. H. Whittaker, M.D., Detroit, one of the members of this Committee, made a special trip to Green Bay, Wisc., and purchased some of Dr. William Beaumont's furniture from a descendant.

Fred A. Coller, M.D., Ann Arbor, made a special trip to St. Louis to obtain photostats of Dr. Beaumont's Note Book.

Your Chairman visited Old Sturbridge Village of Sturbridge, Mass., and Greenfield Village at Dearborn to study restoration projects; he also made a special trip in June, 1954, to Mackinac Island to make the final arrangements for furnishing the Beaumont Memorial.

For the July 17, 1954 Dedication of the Beaumont Memorial, approximately 7,000 invitations were mailed twice—in March and again in June. These handsome

invitations and enclosures were printed through the courtesy of Parke, Davis & Company of Detroit.

The Committee prepared and printed 2,000 copies of the Dedication program; it also arranged, with the assistance of the MSMS Public Relations Department, a souvenir program for distribution to all who attended the July 17 Dedication.

Period furniture was purchased in Montreal. The building of glass display cases and tables for said cases was composed and designed by the Committee, including the bronze plaque. In addition, the Committee supervised the building of a store counter and shelves for the Memorial, in authentic 1820 period design.

The Committee expresses appreciation to the University of Chicago Library for the loan of 24 items of Beaumont Memorabilia, to be on display during the summer of 1954 in the Memorial. It also expresses appreciation for case of antique surgical instruments obtained through the courtesy of the Surgeon General of the United States Army. The Committee is grateful to those persons who gave useful antiques for permanent display in the Beaumont Memorial.

Many minor activities, all necessary to the completion of the Beaumont Memorial for July 17, 1954, were accomplished by the Committee through the work of individual members being assigned to certain projects.

The Committee is grateful to all individuals, firms and organizations mentioned above for their contribution in bringing the Beaumont Memorial to a successful fruition in time for the July 17, 1954 Dedication. Again, the Committee expresses sincere gratitude to those members of the Michigan State Medical Society who voluntarily contributed to the building of this beautiful monument to Michigan's greatest research pioneer, Wm. Beaumont, M.D. However, additional moneys are needed to defray costs of the Memorial's furnishings and also to purchase small parcels of land adjoining the building to give it proper setting. The Committee will accept contributions for the project, and every individual MSMS member should feel it his prideful obligation to contribute to the Beaumont Memorial. It is one of the finest public relations projects ever performed by the medical profession.

Let us all be inspired by this beautiful little building and hope that, in future time medicine will again be enriched by the happy circumstance of more opportunity and intuitive genius so well shown in the Beaumont story.

Respectfully submitted,

Otto O. Beck, M.D., *Chairman*
F. A. Coller, M.D.
Mr. W. F. Doyle
C. T. Ekelund, M.D.
J. H. Fyvie, M.D.
L. J. Hirschman, M.D.
S. W. Hoobler, M.D.
W. S. Jones, M.D.
W. M. LeFevre, M.D.
Professor Emil Lorch
Mr. H. J. Loynd
A. H. Whittaker, M.D.

ANNUAL REPORT OF PUBLIC RELATIONS COMMITTEE

1953-1954

The basic concepts held by the PR Committee of the public relations responsibilities of the MSMS can be defined as follows: Winning and holding friends for medicine by an organized effort to improve standards of medical service, plus educative efforts to help people *appreciate* that only freedom can bring continued progress in their behalf by medicine.

It is well recognized that organized medicine must have a positive, permanent public relations activity and that much of this activity must be carried on by the county medical societies in the home community and by the doctor of medicine in his own office.

Consequently 1953-54 has been notable in that a long range program based on twenty-six specific projects for county medical societies has been developed and a promising start made toward effectuating it. In addition, those PR duties and activities which can only be done by a state organization have been clarified and carried out.

Contrary to usual custom, this committee will not attempt in its report to list the thousand and one details of its work. It will, rather, point to results accomplished in behalf of the medical profession, to difficulties encountered, and to possibilities for future gains. The report is based upon the 26 PR projects presented and approved by The Council on January 30, 1954, and presented the following day at the County Society Secretaries-Public Relations Conference. (See brochure "Winning Friends for Medicine").

1. *The Business Side of Medical Practice.*—Designed to assist the doctor to increase the efficiency and public receptivity of his office, this project, newest of 26, has not reached fullest momentum. Provided to doctors was the AMA brochure, "Rx PR—A Public Relations Manual." A series of lectures was given to senior medical students, and the MSMS PR Conference carried a lecture on "The Businee Side of Medical Practice." Some societies, such as the Kent County Medical Society, provided courses for interns in their teaching hospitals, and Michigan medical journals have carried articles that give valuable hints to doctors on this subject. Much remains to be done in arranging for research in this subject and the distribution of the research findings.

2. *24-Hour Medical Service.*—Probably the people of Michigan never have been better protected with 24-hour medical service availability than they are today. Under the urging of the MSMS, telephone answering services, staggered "days-off," and adequate plans for patient protection when the doctor is away, have been set up in most communities. There is a need, however, for repetition of explanations to the public of how the plans work and how to find adequate care in emergencies, or when illness of a seemingly serious nature strikes at untoward hours. The comment is still heard, although not as often as before, "It's hard to find a doctor who will make house calls,—or who will come in the night or on Saturday afternoon." Also there are several county medical societies which have not yet listed their telephone numbers in all telephone directories in their particular area.

3. *Blue Cross-Blue Shield Relationship with the Medical Profession.*—Progress has been made toward dovetailing the PR and professional relations procedures of the MHS-MMS-MSMS. Much of this excellent work has been outside the realm of the PR Committee per se. (See report of MSMS Advisory Committee to Michigan Hospital Service.) However, liaison has been encouraged successfully by MSMS between Blue Shield and the AMA through the AMA PR Advisory Committee and at the Professional Relations Conference of Blue Shield. Of more importance to Michigan has been the close working relationship with MMS in matters of public relations and legislative interest. This has been repeatedly demonstrated in the meetings re: utilization of Blue Cross-Blue Shield, held throughout the State, in the indoctrination meetings for interns and residents, and in MSMS Journal articles. Even more particularly public relations-wise, this close liaison is operating at the staff level as representatives of MMS join the MSMS PR staff in monthly, weekly, and even daily strategy sessions and in direct contact work with county medical societies. Undoubtedly, closer relationships with MHS at the staff level would also provide greater mutual benefits to both the hospitals and the doctors of medicine.

4. *M.D. Procurement and Placement.*—Now nationally recognized as exemplary is the Michigan M.D. Procurement and Placement Service. Ten state organizations and dozens of county medical societies and community health councils are working together on this program through the medium of the Michigan Health Council, advised by the MSMS Committee on Rural Medical Service. Channels of information to medical schools, medical societies, national and state agencies, community leaders and doctors have been set up. Frequent visits are made to survey areas apparently in need of additional doctors. A constant exchange of information between needy communities and prospective doctors goes on in a well-defined pattern which is doing much to provide a better distribution of medical service. Work in the Legislature on the Basic Science Law (see Legislative Committee report) has assisted in the never-ending drive to get more doctors for rural and other needy areas. This program is one of significant service to the medical profession, to the individual doctor and to the public.

5. *Medical Student Procurement and Medical Scholarships.*—Competition for highest caliber graduates of secondary schools and colleges is constantly growing keener as industry, business and the professions carry on more intensive recruitment campaigns aimed at top level students. Consequently, medical schools see their applicants dwindling in number and quality at the same time that medicine becomes more complex and medical education more expensive. The G.I. Bill has about run out as financial support for medical students, making real financial need on the part of medical school students increasingly evident. MSMS has supplied its PR film "To Save Your Life," as part of recruitment efforts, to high schools for use of vocational guidance counselors. MSMS PR Representatives have visited schools to disabuse students and teachers of the shibboleth that "Only the rich, and sons of doctors, can get into medical school." The Michigan Foundation for Medical and Health Education has supplied loan funds to students who agree to practice in rural areas, but only one county medical society (Lapeer) has set up a scholarship fund. A survey made of doctors assisting medical students financially was disappointing because it indicated little activity to that end. There is a need and an opportunity here for MSMS and county medical societies (and individual M.D.'s) to effectively assist by providing scholarships for worthy students.

6. *Recruitment of Medical Associates.*—Several attempts have been made to produce a single statewide campaign to recruit all branches of medical associates. Meanwhile, individual groups such as nurses, hospital personnel, physical therapists, etc., have carried on their own campaigns with varying success. A pilot program for recruitment of medical assistants has been developed, jointly by the Ingham County Medical Society, the Medical Assistants Society and the Michigan Health Council, in the Lansing area.

The MSMS has continued distribution of its Medical Associates brochure, after revising it and reprinting 10,000 copies. This has aided schools materially in guiding students into these legitimate health fields. It is a daily chore at the MSMS headquarters to answer inquiries occasioned by the publication and distribution of this brochure, which is still recognized after five years as being the outstanding publication on this subject. It has been reprinted in full by other organizations such as the Wisconsin State Medical Society and various pages have been reprinted by the separate groups most primarily concerned.

7. *A Family Doctor For Every Family.*—This idea has been constantly urged on radio and television and by the AMA pamphlet "Why Wait," distributed to Michigan doctors for redistribution to patients.

8. *The Establishment of Health Centers.*—Although no new centers as such have been established during 1953-54, several communities have made their location more attractive to prospective doctors by providing living and practice quarters for them. Repeated surveys by the AMA have placed Michigan as a leader in this movement. The following is a brief review of facilities that have been built in rural areas to attract doctors of medicine:

LUNA PIER—With funds contributed by its 400 residents, Luna Pier constructed a seven-room doctor's office (a $7,000 building).

ONAWAY—A five-bed hospital with offices for two doctors was built by the community of Onaway and surrounding townships two years ago. A new addition is planned following a $40,000 fund drive now in progress.

HILLMAN—A combined home and office was built in this village of 400 entirely from private contributions. The value of the unit is $25,000. The doctor feels that within a year it will be necessary to convert living quarters into office space.

KALKASKA—In Kalkaska (population 1,200) a two-doctor, 10-bed hospital was built at a cost of $180,000.

MONTROSE—A brick duplex with separate quarters for a doctor and a dentist has been erected in this community of 950 persons.

MESICK—The Kellogg Foundation aided Mesick in their efforts to build a clinic.

THOMPSONVILLE—350 persons in this community raised funds to convert an old bank building into an attractive doctor's office. They were successful in attracting a doctor on a part-time basis, three afternoons a week.

9. *The Building and Expansion of Hospitals.*—In its aggregate, doctors of medicine have contributed more money to hospital building than to any other single charity; *and more than any other single profession has given to any single charity.* The MSMS has emphasized this fact at every opportunity. It has also worked with various agencies in many communities interested in developing new and better hospitals to the end that the advice of doctors of medicine has been sought prior to the inauguration of fund-raising campaigns. As a result, the hospitals have been constructed providing more efficient operation and doctors have received fair credit for their part in the campaigns. Hospital construction seems to be a never-ending problem and the regulation of the hospitals a subject which merits continued close scrutiny. Legislation affecting this subject was thoroughly reviewed and the minimum control (commensurate with federal laws) placed in the hands of state authorities. Other legislation dealt with the construction of state institutions for the mentally ill, TB convalescent facilities, etc. (see Legislative Committee Report), and in each instance, the basic principles of hospital policy of the MSMS have been given due consideration.

10. *The Administration, Reporting and Referral of Indigent, County, State and Federal Patients.*—Limited progress has been made by the MSMS in this project due to the complexity of the problem, varying as it does in every community. The distribution of the Michigan Health Council Directory has been of some assistance. Contacts with state agencies and statewide voluntary health associations have been made in an attempt to simplify forms and reporting procedures and to urge them to better inform doctors regarding services available to indigent patients. An attempt is now being considered with the welfare people to get them to assist in clarifying this hodgepodge of services and agencies.

11. *Providing Means to Maintain Highest Standards in the Administration of Medical Practices.*—(See report of Committee on Mediation).

12. *Develop and Maintain a Mutual and Friendly Understanding Between the Press and the Medical Profession.*—Many efforts in this regard have been made by the MSMS. Press dinners have been held in Grand Rapids and Detroit. Personal contact has been made by the MSMS PR staff with newsmen and science writers. On occasion, this friendship has been sorely tried as keen competition between the various newspapers and with other media developed. A code to guide doctors in their relationship with the press has been developed but still awaits approval of all parties concerned. Excellent coverage has been given MSMS affairs and the work of the doctors generally. Editorial comment has been favorable and widespread. Less than one per cent of all articles and editorials written during the past year could be considered adversely critical to the profession in Michigan. Much still remains to be done on the county medical society level to develop the "Know Your News" system.

13. *Use of Pamphlets.*—A total of 109,808 pamphlets were distributed in the first mailing to MSMS members of the AMA pamphlets, "What about this Doctor Shortage," "A Doctor for You," "The Amazing Story," "Your Money's Worth in Health." A second mailing was made of the pamphlets "Why Wait," "On Guard," "Health Today" and "Quack" in August, and present returns indicate that the total distribution will exceed the first mailing. Over 100,000 of these and similar pamphlets were distributed at the Michigan State Fair at the MSMS exhibit. These pamphlets, plus such literature as "Science vs. Chiropractic" prepared by the Public Affairs Committee, have been valuable in supplementing the information disseminated on radio and TV thereby giving people, as the titles of the pamphlets indicate, the true story on subjects of prime concern to the profession. (For distribution of Medical Associates brochures see Item 6 above). Jointly with the Michigan Heart Association, a biennial report on rheumatic fever and heart disease was published and distributed. In addition MSMS pamphlets have been distributed with the Michigan Health Council Bulletin (1900) in the MSMS exhibit at the Michigan Rural Health Conference. MSMS has received several pages of review in the Michigan Directory of Health Services (MHC).

14. *Effective Use of Radio and TV by the Medical Profession.*—The MSMS has taken advantage of materials from the AMA and other sources to maintain effective weekly radio and TV presentations at minimal cost. The following stations have carried MSMS radio programs on a weekly basis: WMTE, Manistee; WABI, Adrian; WKNX, Saginaw; WJMS, Ironwood; WSTR, Sturgis; WIBM, Jackson; WKAR, East Lansing (2 series simultaneously).

On a five-day per week basis: WHAK, Rogers City; WKNK, Muskegon.

The "Tell Me Doctor" show (rebroadcast 5 days per week): WKZO, Kalamazoo; WHFB, Benton Harbor.

On a special program basis: WJR, WWJ, WXYZ, CKLW, all of Detroit; WILS, WJIM, Lansing; WKZO, Kalamazoo; WLAV, WOOD, Grand Rapids.

MSMS programs have appeared each week over WPAG-TV, Ann Arbor, in co-operation with the Washtenaw County Medical Society. Several stations have carried special broadcasts, such as: WWJ-TV, Detroit; WJIM-TV, Lansing; WKZO-TV, Kalamazoo. Outstanding in behalf of medicine has been the TV program telecast over a network of Michigan stations presented by the University of Michigan Medical School under the direction of Dr. Towsley.

Of great value has been the MHC "Court of Health" program success of the MSMS-TV show. "To Your Health" broadcast over WJBK-TV, Detroit. This program has had remarkable success. As of July 15, 1954, there have been in 25 months—111 consecutive weekly telecasts, 35 different health subjects presented, 112 doctors of medicine, 18 nurses, 7 pharmacists, 28 public health people, 3 dentists and 92 representatives of health organizations. In every instance, the material has been authenticated for fact and policy by MSMS and its members. Reaching 40,000 persons weekly, this program results in a far better understanding of the medical profession by the public and is more effective, because of the lack of appearance of self adulation or bias, than if it were sponsored by the MSMS.

15. *Medical Forums.*—These excellent public series were carried out with remarkable success by the county medical societies in the respective cities. The interest in these forums is testified to by their remarkable attendance, plus the significant space given their deliberations by the newspapers sponsoring the Forum. In Detroit, Grand Rapids, Jackson, Ann Arbor and Kalamazoo, Medical Forums have drawn thousands of people to hear the truth about significant progress in the control of dread diseases. Repeats of these Forums are being planned.

16. *Adult Education Programs.*—Less dramatic than the medical forum, these classes under the "night school" program directed from the Office of the Superintendent of Public Instruction are nevertheless important. 1953-54 has seen the continuation of these programs in some communities, but there has been less interest this year than usual, perhaps because of lack of continued stimulation from the MSMS headquarters. More attention should be paid to this program in 1954-55.

17. *Use of Motion Pictures for the Public.*—No new motion pictures have been developed by MSMS for public viewing this year. However, wide distribution has continued of "To Save Your Life," "Lucky Junior," and "To Your Health;" and the film "Cheers for Chubby" (renamed "Losing to Win" for 16 mm use) was sponsored in the theaters of Michigan by the MSMS in conjunction with the Metropolitan Life Insurance Company. 238 theaters carried the program, total viewing audience 357,799. Several films "Operation Herbert," "A Citizen Participates," "Your Doctor," the "What-To-Do" series of 6 five-minute films were developed by the AMA and these were used generously on TV. A new film on medical associates has been considered and has been ordered by The Council. This will be produced during the coming year. The entire film industry was covered by a MSMS survey to ascertain the films available for public use. These were carefully carded and indexed and have been viewed with ten selected for purchase. In connection with motion picture exhibitions, it should be noted that 33 medical motion pictures were shown at the State Fair at the MSMS exhibit to an audience of over 31,000. This exhibit was manned for ten days and was valuable from the standpoint of reaching a particular public that is not ordinarily reached with educational materials, re: health policies.

Also distributed was "The Picture of Health," produced by the Michigan Health Council, which has been shown throughout Michigan and in 17 other states. This film depicts State and County Medical Society participation in community Health Council work; is most valuable in showing the interest of doctors' organizations in serving their community.

18. *The Annual Physical Check-Up.*—This project, held in abeyance for over a year, has been given the green light by The Council and work preparatory to the campaign is being done. The State Bar of Michigan has approved a joint effort with the MSMS on this project.

19. *Indoctrination of Medical Students, Interns, Residents and New Members.*—This has been carried out by a series of lectures given senior medical students at the University of Michigan; by special programs for interns and residents at the time of Annual Session of the MSMS. A special program is planned at the 1954 Annual Session for doctors newly qualified (during the past year) to practice in Michigan.

20. *Strengthening Medical Societies.*—This activity is part of the general program of the MSMS and is not the prerogative of the PR Committee. However, the programs of the County Secretaries—Public Relations Conference do much to increase the strength of county medical society activity, and it is that strength that indirectly produces active PR practices in the county medical societies.

21. *Co-operation with Other Voluntary Organizations.*—(See Annual Report of The Council). The single organization which has assisted the MSMS most effectively is the Michigan Health Council as is indicated by reference to its work throughout this report. Its program has always been in consonance with MSMS PR objectives and it has 35 state organizations and 44 community health councils among its members. Of particular value has been its advocacy of the doctors' point of view to organizations of laymen.

22. *Co-operation with Government Agencies.*—(See Annual Report of The Council).

23. *MSMS Handbook.*—The publication has been outlined, written and will be published during 1954. It presents a guide to MSMS procedures and services available to the individual doctor. Its major value is to assist in indoctrination of new members and as a reference source when a member seeks to obtain information or work in behalf of the MSMS.

24. *Co-operation with Professions and Vocations Whose Science or Work Borders upon Medical Science and Medical Practice.*—This is the newest of the PR projects attempted. It is difficult but rewarding. So far, the work done has been mainly in the fields of law, education, psychology and social work. Results cannot yet be itemized, but a closer and more understanding relationship is evolving and prejudices respecting the medical profession erased.

25. *Increasing the PR Value of the Woman's Auxiliaries and the Medical Assistants Society.*—(See Annual Report of The Council).

26. *A Legislative Relations Program.*—(See Report of Legislative Committee). Not directly a part of this program (but with no other project to list it under in this report) is the Good Citizenship Campaign. This type of program is well known to the membership and it needs no reviewing. It has been reactivated this year, an election year, and again is revealing its effectiveness in making friends for medicine.

More details of the entire program are outlined in the brochure "Winning Friends for Medicine." With the first presentation of this total effort on January 31, 1954, it is obvious that all county medical societies have not had the time to incorporate these programs in their public relations efforts to the fullest extent.

However, some county medical societies have found this outline most helpful and the remainder are preparing work which will flower in 1955. Only by a concerted effort of the MSMS, the county medical societies and the individual doctor—with each doing his part—can the public relations program of the medical profession function effectively and our reservoir of friends be maintained at a high level.

Respectfully submitted,

C. A. Payne, M.D., *Chairman*
R. A. Johnson, M.D., *Vice Chairman*
R. W. Teed, M.D., *Vice Chairman*
S. E. Andrews, M.D.
H. G. Bacon, M.D.
W. E. Barstow, M.D.
J. F. Beer, M.D.
H. G. Benjamin, M.D.
F. C. Brace, M.D.
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H. B. Fenech, M.D.
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W. J. Herrington, M.D.
E. J. Hill, M.D.
F. P. Husted, M.D.
K. H. Johnson, M.D.
R. C. Kingswood, M.D.
E. C. Long, M.D.
O. B. McGilliguddy, M.D.
H. J. Meier, M.D.
G. E. Millard, M.D.
E. S. Oldham, M.D.
A. C. Pfeifer, M.D.
L. A. Pratt, M.D.
W. Z. Rundles, M.D.
A. E. Schiller, M.D.
J. M. Sheldon, M.D.
E. F. Sladek, M.D.
E. L. Spoehr, M.D.
C. K. Stroup, M.D.
C. L. Weston, M.D.
Wayne L. Whitaker, Ph.D.
J. T. P. Wickliffe, M.D.
V. M. Zerbi, M.D.
L. Fernald Foster, M.D., *Advisor*
L. W. Hull, M.D., *Advisor*
B. T. Montgomery, M.D., *Advisor*

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PARENT CO-OPERATION IN SALK VACCINE FIELD TRIALS EXCELLENT

Final check of the Salk vaccine field trials showed that of the 54,600 boys and girls participating in the ten counties, less than half of one per cent failed to complete the series of injections. The injections were finished on June 11 and the last blood samples were taken on June 25.

NUMBER OF 70 MM. CHEST X-RAY FILMS INCREASES

If the first five months of 1954 are a reliable criterion, the year's goal of 300,000 small chest x-ray films will be exceeded.

The number of 70 mm. chest x-ray films taken with the department's mobile units during the first five months of 1954 increased 44 per cent over the number taken in the first five months of 1953. In the period January through May of 1954, with an average of 3.6 units in operation, 128,091 small films were taken. For the same period in 1953 the total was 88,799.

Counties visited during the five-month period this year were Branch, Hillsdale, Kalamazoo, Oakland and Sanilac.

MEDICAL EXTERN PROGRAM REPEATED

The medical extern program carried on for the first time in the summer of 1952 and repeated successfully in 1953 is in operation again this year. Four medical students from the University of Michigan are working in and through the department. One is in the Division of Tuberculosis and Adult Health, one in Clinical Pathology in the Division of Laboratories, one is working with the Monroe County Health Department and one in the Detroit Health Department.

Objective of the program is to give the students actual experience in public health and at the same time provide added personnel for special projects.

TUBERCULOSIS REGISTER BEING SET UP

A new tuberculosis register is being set up in the Division of Tuberculosis and Adult Health that will help to provide the facts needed for better program planning and more adequate control measures. This is one of the projects made possible by the special appropriation of the 1954 Legislature.

The new register will provide state and local health departments with a more accurate picture of the number of persons in homes throughout Michigan who have active tuberculosis and should be receiving hospital care, the number of persons needing care and not hospitalized, the number of suspect cases undergoing evaluation, the persons under follow-up after discharge from the sanatorium and the number of persons currently hospitalized. It will also be a source of up-to-date information for private physicians.

POSTING OF HDA SIGNS CONTINUES

With some 1,800 of the green and gold metal HDA signs already marking health department approved resorts in Michigan, additional signs are being put up daily. Sanitarians on the staffs of the local health departments make the necessary inspections and post the signs at resorts that meet the standards set up by joint agreement of local and state health officials.

In counties without full-time health departments, minimum basic services in resort sanitation are being provided during the summer months by five assistant sanitarians working under the Division of Engineering of the state health department. Several local health departments also employ additional sanitarians for resort sanitation work.

A new 9 x 12 cardboard sign for posting in food handling establishments, the same color as the metal HDA resort markers and carrying the same design and wording, is now being furnished by the state health department to local health departments wishing to use them. At the top of the card is the name of the local health department issuing it.

PHYSICIAN ADDED TO DISEASE CONTROL STAFF

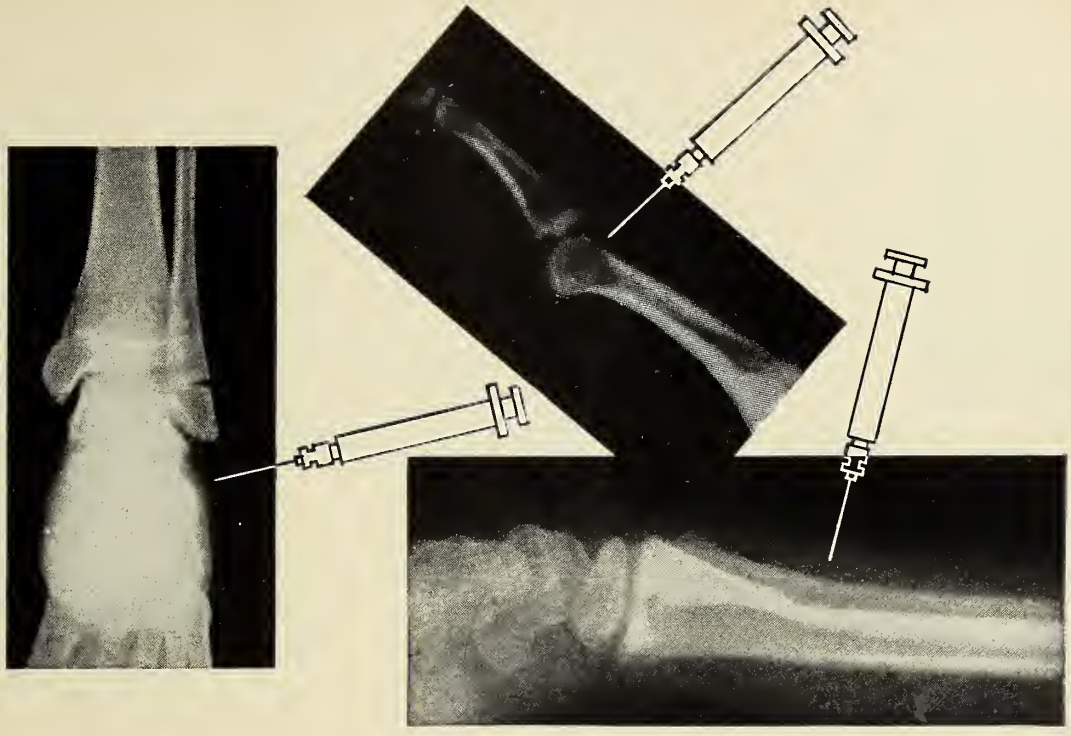
George Agate, M.D., has joined the staff of the Division of Disease Control, Records and Statistics as Chief of the Acute Communicable Disease Section. Dr. Agate has an M.S.P.H. degree from the School of Public Health of the University of Michigan and has had training in pediatrics and experience in communicable disease control.

BIRTHS CONTINUE ON UPSWING

Births for each month of the first five months of 1954 have exceeded those for the corresponding month of 1953. Provisional figures through May stand at 72,575 births, 5,755 more than for the same period in 1953.

WHAT DO YOU THINK?

The department is interested in knowing whether members of the Michigan State Medical Society feel that the Michigan Edition of *The Heart Bulletin* which has been sent to them for some time by the Michigan Department of Health has been informative and helpful and should be continued. An opinion would be appreciated. Please send communications to the MSMS Office, attention, Mr. Wm. J. Burns, 606 Townsend Street, Lansing 15, Michigan.



Use of Alidase® in Closed Wounds: Contusions, Sprains, Dislocations, Simple Fractures

In traumatic surgery[1] where "definitive treatment . . . is often delayed while the surgeon waits for nature to dispose of hematoma and oedema" Alidase is an efficient means[1, 2] of accelerating dispersion of accumulated fluids.

Swenson[2] has described his highly successful results with Alidase in various types of closed wounds. He summarized them as follows:

To remove local fluid accumulations in contusions or bruises, "The usual dose, 500 viscosity units Alidase® mixed in a small amount of normal saline, is injected into the localized fluid. Mixing the hyaluronidase in 1 per cent procaine solution will also produce local vasodilatation, relief of local pain and more rapid absorption of the fluid mass. This method can also be applied to traumatized bursae or synovial spaces which do not respond to repeated aspirations."

The point of maximal pain is infiltrated with 10 cc. of a 1 per cent procaine solution to which 500 viscosity units of Alidase have been added. With this simple technic, a high percentage of successful results has been obtained.

Alidase may be used to advantage to produce more rapidly a short-acting, complete block anesthesia and to facilitate reduction in subluxation or complete dislocations of the interphalangeal joints. When anesthesia is required for fracture reduction, local block anesthesia can be simplified by adding Alidase to the anesthetic solution. Alidase also tends to decrease local edema and hematoma formation.

Fluids administered with Alidase are rapidly absorbed from subcutaneous tissue. The simplicity of hypodermoclysis avoids the cumbersome arm board, permits convenient administration with little or no pain or swelling, is vein-sparing and saves nursing time in such conditions as burns, postoperative states, toxemias and parenteral alimentation.

Alidase (brand of hyaluronidase) is supplied in serum-type ampuls of 500 viscosity units. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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1. MacAusland, W. R., Jr.; Gartland, J. J., and Hallock, H.: The Use of Hyaluronidase in Orthopaedic Surgery, J. Bone & Joint Surg. *35-A*:604 (July) 1953.
2. Swenson, S. A., Jr.: Minor Surgical Aspects of Closed Wounds, Am. J. Surg. *87*:384 (March) 1954.

In Memoriam



ROY HERBERT HOLMES, M.D., of Muskegon, former editor of THE JOURNAL of the Michigan State Medical Society, died May 4, 1954, at the age of fifty-eight.

Dr. Holmes had been active in MSMS affairs, serving as a member of The Council and of numerous committees. From 1939 until he entered the army in September, 1942, he was editor of THE JOURNAL. He was a past president of the Muskegon County Medical Society, and prominent in its activities.

Dr. Holmes was born at Grand Rapids, January 22, 1896. He was graduated from Central High School there and attended Kalamazoo College before entering the University of Michigan. He received his M.D. degree from the University in 1922. After internship at Massachusetts Memorial Hospital, Boston, he entered practice in Muskegon in 1923.

Dr. Holmes was a leader in setting up the Muskegon County Health Department. He was a member of Emanuel Lutheran Church and active in the American Legion and fraternal organizations.

NATHAN J. FRENN, M.D., of Bark River, a past president of the Upper Peninsula Medical Society and of the Delta-Schoolcraft County Medical Society, died unexpectedly April 18, 1954, while treating an auto accident victim at St. Francis Hospital, Escanaba. He was fifty-eight years old.

Long active in medical and civic affairs, Dr. Frenn was president of the St. Francis Hospital medical staff at the time of his death. He was a past commander of his American Legion Post and of the Upper Peninsula Department of the American Legion. Other activities included membership in the Elks and Knights of Columbus. A native of Syria, Dr. Frenn came to the United States with his parents when he was four years old, living in Milwaukee and Oconomowoc, Wisconsin, before moving to Delta County about 1915. Dr. Frenn received both his B.S. and M.D. degrees from Marquette University, graduating from medical school in 1932. In 1937-38, he took postgraduate work in internal medicine at the University of Pennsylvania.

Dr. Frenn had practiced in Bark River and Escanaba since 1932.

During World War I, Dr. Frenn served in the Army, going overseas with the 85th Division.

Dr. Frenn is survived by his widow, Mae, a daughter, Natalie Mae, and a son, John Derrick.

SIMPSON W. GREEN, M.D., of Detroit, died May 4, 1954, at the age of sixty-seven.

A native of Springfield, Illinois, Dr. Green came to Detroit as a boy. He was graduated from the University of Michigan School of Pharmacy and the Detroit College of Medicine.

He was a member of the Masonic Order and Phi Delta Epsilon medical fraternity.

Surviving are his widow, Berdena, and a brother, J. H. Green, of Miami, Florida.

FREDERICK E. LAPHAM, M.D., of Detroit, was killed April 16, 1954, near Winchester, Kentucky, when his automobile collided with a truck. Dr. Lapham was 47 years old. He was traveling south on a vacation trip with Mrs. Lapham at the time of the accident.

Dr. Lapham was a graduate of the Detroit College of Medicine, now a part of Wayne University, and was on the staff of Grace Hospital. He was a general practitioner.

BENJAMIN A. PRIBORSKY, M.D., a native of Detroit who had practiced in that city for forty years, died April 12, 1954, at the age of sixty-two. Throughout his practice, Dr. Priborsky had engaged in obstetrics and gynecology and is reputed to have delivered more than 11,000 babies.

Dr. Priborsky was educated in the public schools of Detroit and was a graduate of the old Detroit College of Medicine, now part of Wayne University. He served his internship at Samaritan Hospital.

Dr. Priborsky was on the staff of Holy Cross Hospital, and was a former Chief of Obstetrics and Gynecology at Providence Hospital .

Dr. Priborsky was a Diplomate of the American Board of Obstetrics and Gynecology and a member of the Michigan Society of Obstetrics and Gynecology. Among his activities was membership in the Detroit Historical Society.

Surviving are his wife, Wanda; two sons, Hugo C. and Donald B.; a brother Edward of Berkeley, California, and a sister, Mrs. Sam Wareham of Columbus, Ohio.

GEORGE J. SWEETLAND, M.D., who had practiced in Constantine for thirty-eight years, died March 29, 1954, at the age of eighty-one.

For many years he had been a community leader and school board member, and in his early years was a well-known football coach.

Twice Dr. Sweetland served as president of the St. Joseph County Medical Society.

Dr. Sweetland was born in Dryden, N. Y., and educated at Dryden Academy. He attended Union College,

(Continued on Page 920)



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1. Rev. Gastroenterology 20:744 (Oct.) 1953; abstract in J. A. M. A., 153:1580 (Dec. 26) 1953.

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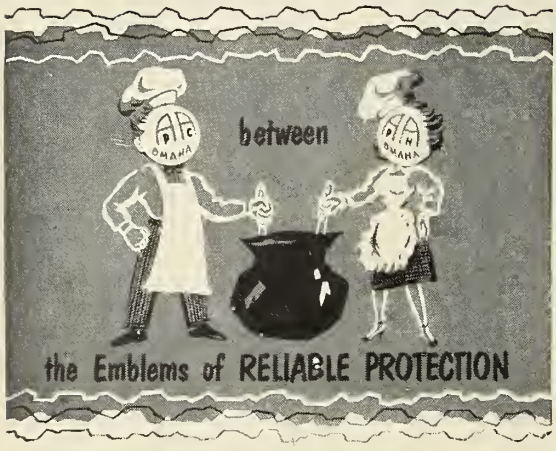
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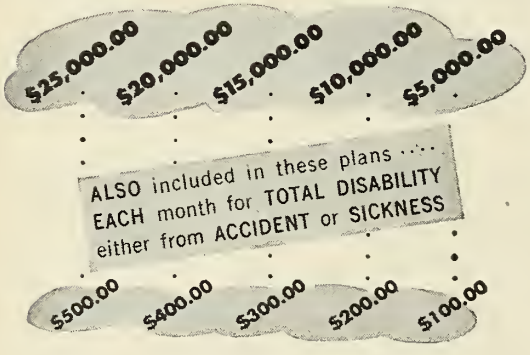
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GEORGE J. SWEETLAND, M.D.

(Continued from Page 918)

Schenectady, N. Y., and was graduated from Hobart College, Geneva, N. Y., in 1897. Following his graduation, he came to Michigan, where an uncle and a brother were already practicing medicine, and enrolled in Grand Rapids medical college. His medical training was interrupted when he volunteered for army duty in the Spanish-American War.

Following his graduation from medical school he coached at Ishpeming High School, producing state champion football teams for two successive years. He then became coach at the University of North Dakota for three years. From there he went to Willamette University, Salem Oregon, as coach, establishing an unusual record. While at Willamette, Dr. Sweetland completed his internship and received a second M.D. degree from that University. He was a classmate of Dr. McIntyre, personal physician to President Roosevelt.

After two years as director of athletics at Hobart College, Dr. Sweetland came to Michigan in 1916, establishing his practice in Constantine. Continuing his interest in athletics, Dr. Sweetland was instrumental in giving, through Mr. Robert Weir, Sr., the Constantine High School stadium to the school as a memorial to his son, who died in 1937 at the age of nineteen of poliomyelitis.

He was a member of the Episcopal Church and various fraternal organizations.

Dr. Sweetland is survived by one son, Monroe, Democratic National committeeman from Oregon; a daughter, Mrs. Carl Wahlin, of Round Lake, Ill., four grandchildren and two sisters.

MEDICAL PUBLIC RELATIONS

(Continued from Page 880)

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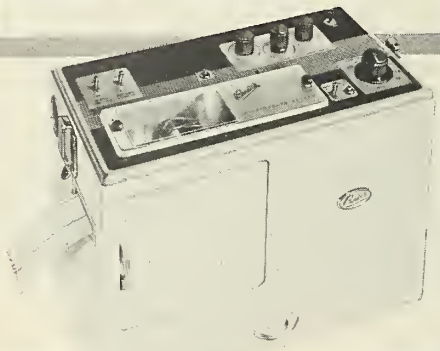
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Communication

Mr. William J. Burns
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Dear Bill:

Ordinarily I do not read Mr. Ruark's syndicated column. However, when one belongs to the medical profession and one sees the headline, "Doctors Have Responsibility," it is excusable if we tarry long enough to ascertain whether new obligations have been discovered.

Much to my amazement, the widely publicized Mr. Ruark would have our patients believe we are an addicted, drunken, incompetent tax-dodging lot given to the support of malpractice. When I had finished reading this vituperous article, I obtained Mr. Ruark's latest book so that I could further acquaint myself with our candid critic. From that interesting autobiography, from a small section of Mr. Ruark's life, I would judge he is in an excellent position to judge anything pertaining to drunkenness and incompetence. Few actions were consummated in the story without liberal consumption of Scotch and Martinis. His descriptions are liberally smeared with profanity, which I suppose is due to the aforementioned Scotch and Martinis. Perhaps we should disregard his name-calling, inasmuch as on page 66, in "The Horn of the Hunter" he affectionately addresses his wife Virginia in the following manner, "get up you lousey slut."

Mr. Ruark is gifted in the art of destruction. He is especially adept at making these destructions pay off whether he attempts to destroy wildlife or the reputation of an honored profession. In the present era, it has become customary to condone Mr. Ruark's type of journalism for its entertaining qualities, even if what he writes is not factually substantiated.

Mr. Ruark suffers from a psychosis. His deviation in no way detracts from his ability to write for mass appeal. For this reason, doctors of medicine may be resentful of the jibes and insinuations that are bound to follow, from those we serve. We should be aware of the spirit in which these references will be made. Our patients will frequently follow these pleasantries with, "Why can't these writers tell the truth?" The probable answer is they do not know the truth. In fact, they may not wish to know the truth because, then, their works would lack reader appeal.

In the final analysis, we are doctors of medicine. We must remember that those who are mentally deviated are as worthy of our kind consideration as those who have a physical ill. If Mr. Ruark can be interested in what is true concerning the accusations he has made, he may want to correct his errors in a subsequent publication.

Best wishes,

C. E. UMPHREY, M.D.

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MICHIGAN AUTHORS

Ralph W. Ryan, M.D., and **O. T. Mallery, Jr., M.D.,** Ann Arbor, are the authors of an article entitled "The Eyes of the Indutsrial Worker," published in *Industrial Medicine and Surgery,* June, 1954.

Wilfred N. Sisk, M.D., Kalamazoo, is the author of an article entitled "The Part Allergy Plays in Back Pain," published in *Industrial Medicine and Surgery,* June, 1954.

Faye G. Abdellah and **Eugene Levine,** Division of Nursing Resources, U. S. Public Health Service, Washington, D. C., are the authors of an article entitled "Why Nurses Leave Home" (based on survey of nursing needs and resources in Michigan), published in *Hospitals,* June, 1954.

Clarence D. Selby, M.D., Detroit, is the author of an article entitled "Compensation for Residual Disability," presented at the medical conference of the eighteenth annual meeting of the Industrial Hygiene Foundation held at Mellon Institute, Pittsburgh, November 18, 1953, and published in *Industrial Hygiene Digest,* December, 1953, and *The Pennsylvania Medical Journal,* June, 1954.

Clarence E. Rupe, M.D., Howard R. Marvel, M.D., Detroit, **Robert J. Ryan, M.D.,** Chicago, and **Edward L. Quinn, M.D.,** Detroit, are the authors of an article, entitled "Typhus Fever (Brill's Disease) Complicated by Diabetes Insipidus" (Report of a Case), published in *The Journal of the American Medical Association,* May 29, 1954.

Lynn A. Ferguson, M.D., James A. Ferguson, M.D., Ben R. Zwalenburg, M.D., and **Edward F. Ducey, M.D.,** Grand Rapids, are the authors of an article entitled "Clinical X-Ray Staff Conferences on the Colon," presented before the Eighteenth Annual Convention of the National Gastroenterological Association, Los Angeles, California, in October, 1953, and published in *The American Journal of Gastroenterology,* June, 1954.

Robert A. Gerisch, M.D., F. Dewey Dodrill, M.D., Edward Hill, M.D., and **Aran S. Johnson, M.D.,** Detroit, are the authors of an article entitled "Mechanical Heart Blood Pressure Patterns which Permit Direct Visualization of the Mitral Valve in the Living Heart," published in *Harper Hospital Bulletin,* March-April, 1954.

P. J. Huber, M.D., and **A. B. Stearns, M.D.,** Detroit, are the authors of an article entitled "The Bifrontal Approach for Aneurysm of the Anterior Communicating Artery" (Case Report, Using Hypotensive Anesthesia), published in the *Harper Hospital Bulletin,* March-April, 1954.

Kathryn J. McMorrow, M.D., Detroit, is the author of an article entitled "Diagnosis and Treatment of Cervical Spondylosis," published in *GP,* published by the American Academy of General Practice, June, 1954.

Frank L. Rector, M.D., Evanston, Illinois, formerly Executive Secretary of the Cancer Control Committee of the Michigan State Medical Society, is the author of an article entitled "Responsibilities of the Family Physician in the Cancer Control Program," published in *GP,* June, 1954.

J. S. DeTar, M.D., Milan, is the author of an article entitled "The Family Physician's Attitude Toward Cancer," published in *GP,* June, 1954.

Ernest L. MacQuiddy, M.D., Omaha, and **John M. Sheldon, M.D.,** Ann Arbor, are authors of an article entitled "Allergy of the Eye, Ear, Nose, and Throat," published in AMA, *Archives of Otolaryngology,* June, 1954.

J. S. DeTar, M.D., Milan, is the author of an editorial entitled "Is the Young M.D. Properly Prepared for General Practice?" published in *Current Medical Digest,* June, 1954.

James L. Wilson, M.D., Ann Arbor, is the author of an article entitled "Respiratory Obstruction in Infancy," presented at the Maine Medical Association Centennial Session, Portland, Maine, June, 1953, and published in *The Journal of the Maine Medical Association,* June, 1954.

Hermann Pinkus, M.D., and **Eldon T. Perry, M.D.,** Monroe, are the authors of an article entitled "The Influence of Hyaluronic Acid and Other Substances on Tensile Strength of Healing Wounds," published in *The Journal of Investigative Dermatology,* December, 1953.

Carey P. McCord, M.D., Ann Arbor, is the author of an article entitled "Industrial Medicine and the Private Practitioner," published in the *Illinois Medical Journal* for June, 1954.

Hermann Pinkus, M.D., Monroe, and **Catherine Heise Steele, M.D.,** Detroit, are the authors of an article entitled "Preliminary and Short Report. Differential Staining of Mitochondria and Tonofibrils in Human Epider-

mis," published in *The Journal of Investigative Dermatology,* May, 1954.

Ralph W. Ryan, M.D., and **O. T. Mallery, Jr., M.D.,** Ann Arbor, are the authors of an article entitled "Eye Injury and Protection," published in the *University of Michigan Medical Bulletin,* May, 1954.

R. K. Ratliff, M.D., Ann Arbor, is the author of an article entitled "Hyaluronidase in the Treatment of Paraphimosis," published in *The Journal of the American Medical Association,* June 19, 1954.

Bernard N. Soderberg, Colonel, MC, USA, **Arnold A. Albright,** Colonel, MC, USA, and **Joseph Burdette,** Lieutenant Colonel, MC, USA, from Percy Jones Army Hospital, Battle Creek (now inactivated), are the authors of an article entitled "Reconstruction of Treacheal Lumen by Skin Graft and Cicatricial Diaphragm Method," published in *United States Armed Forces Medical Journal,* June, 1954.

Hermann Pinkus, M.D., Monroe, is the author of an article entitled "Anatomy of the Skin," published in *Dermatologica, International Journal of Dermatology,* Vol. 108, No. 1, 1954. He also is the author of an article entitlcd "Life History of Naevus Syringadenomatosus Papilliferus," published in the AMA *Archives of Dermatology and Syphilology,* March, 1954; and an article entitled "Premalignant Fibroepithelial Tumors of Skin," published in the AMA *Archives of Dermatology and Syphilology,* June, 1953.

Brock E. Brush, M.D., Raymond W. Monto, M.D., Joseph Abraham, M.D., E. J. Gordon, M.D., and **J. Ralph Calder, M.D., Detroit,** are the authors of an article entitled "Use of Cortisonc in Thrombocytopenic Purpura," published in the AMA *Archives of Surgery,* June, 1954.

J. H. Hertzler, M.D., A. E. Miller, M.D., and **William M. Tuttle, M.D.,** Detroit, are the authors of an article entitled "Present Concepts in the Treatment of Empyema in Children," published in the AMA *Archives of Surgery,* June, 1954.

J. L. Wilson, M.D., is the author of an article entitled "Treatment of Respiratory Difficulty," published in *Pediatric Clinic of North America,* 1/1a:20-25, 1953.

* * *

Since 1900, the population in the United States has doubled, but the number of persons 45 to 64 has trippled, while the number 65 years and older has quadrupled.

As of 1952, there were 13,000,000 over 65 increasing 400,000 per year.—Federal Security Agency, Fact Book on Aging.

* * *

The Student American Medical Association held its best and largest annual meeting early in May, 1954. Fifty-seven delegates participated in the House of Delegates sessions, and the registrations for members and guests totaled nearly 1,000.

John Oates, Jr., sophomore delegate from the Bowman Gray School of Medicine, is the new national president. Other officers are: Dan Heffernan, junior, Wayne University, vice president, and Don Overstreet, junior, University of Alabama, treasurer.

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Surgical Anatomy and Clinical Surgery, two weeks, August 23, October 25
Surgery of Colon and Rectum, one week, September 13
Basic Principles in General Surgery, two weeks, September 20
Breast and Thyroid Surgery, one week, October 25
Thoracic Surgery, one week, October 11
Esophageal Surgery, one week, October 4
General Surgery, two weeks, October 4; one week, October 4
Gallbladder Surgery, ten hours, October 25
Fractures and Traumatic Surgery, two weeks, October 25
GYNECOLOGY—Office and Operative Gynecology, two weeks, September 20
Vaginal Approach to Pelvic Surgery, one week, September 13
OBSTETRICS—General and Surgical Obstetrics, two weeks, October 4
MEDICINE—Two-week Course, September 27
Electrocardiography and Heart Disease, two weeks, October 11
Gastroenterology, two weeks, October 25
Gastroscopy, one week, September 13
RADIOLOGY—Diagnostic Course, two weeks, October 4
Clinical Uses of Radio Isotopes, two weeks, October 4
PEDIATRICS—Clinical Course, two weeks, by appointment
Congenital and Rheumatic Heart Disease in Infants and Children, one week, October 11 and October 18; two weeks, October 11
UROLOGY—Two-week Urology Course, September 20
Ten-day Practical Course in Cystoscopy every two weeks

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On Wednesday, June 30, 1954, a testimonial dinner in honor of **Robert Kennedy, M.D.**, was held in the Grand Ballroom of the Hotel Statler in Detroit. It was preceded by a cocktail party, and the party was sponsored by Bob's former residents.

More than 200 friends and fellow physicians and their wives attended the dinner. Dr. Carl F. Shelton was chairman of the dinner, and Dr. William E. Johnston and Dr. John P. Hubbard shared the duties of toastmaster. There were no windy after-dinner speeches; instead, a clever "This Is Your Life" sort of program was presented.

Dr. Charles Stevenson represented Wayne University, where Dr. Kennedy is Associate Professor of Obstetrics, and a representative from almost every hospital in the Detroit area spoke a few words. Former residents from Ohio, Indiana, Ontario and throughout the State of Michigan were present.

Mr. Clifford Prevost, secretary to Mayor Albert E. Cobo, presented a scroll from the Mayor in honor of Dr. Kennedy, and keys to the City of Detroit were presented both to Dr. and Mrs. Kennedy. A book signed by everyone present at the dinner and a plaque from the former residents were also presentd to Dr. Kennedy.

* * *

The American Board of Obstetrics and Gynecology, as of May 17, 1954, has certified 383 candidates, of whom the following are from Michigan:

Allen Berlin, M.D., 722 Maccabees, Detroit.

Laurence Bruggers, M.D., 1703 N. Michigan, Saginaw.

Frank A. Duwe, M.D., 25300 Fenkell, Detroit.

Herbert B. Gaston, M.D., 3001 W. Grand Blvd., Detroit.

Arthur D. Harris, M.D., 8943 Twelfth St., Detroit.

Harold F. Jarvis, M.D., 14110 Gratiot Ave., Detroit.

Louise A. Kozlow, M.D., 4274 N. Woodward, Royal Oak.

Michael J. La Hood, M.D., 17555 James Couzins, Detroit.

Sidley S. Meyers, M.D., 19635 Mack Ave., Grosse Pointe Woods.

Arthur C. Rutzen, M.D., 771 Fisher Bldg., Detroit.

William C. Vanden Berg, M.D., Blodgett Hosp. Med. Bldg., Grand Rapids.

A. L. Hubert Verwys, M.D., 815 Alger St. S.E., Grand Rapids.

Joseph Watts, M.D., 742 Macabees Bldg., Detroit.

* * *

Through the good offices of Colonel James M. Phalen, M.C., (Ret.), the Armed Forces Medical Library has received the diary of the late Major General Merritte W. Ireland, M.C., for the period May 17 through August 31, 1917. During this period, General Ireland was serving as Chief Surgeon of the American Ex-

peditionary Force; he was Surgeon General of the Army for thirteen years prior to his retirement in 1931. General Ireland was from Michigan.

* * *

The Research Grants Committee of Eli Lilly and Company recently approved to support research projects in the following universities:

University of Michigan: Thomas Francis, Jr., M.D., department of epidemiology, School of Public Health; fellowship for Dr. Nakao Ishida, of the School of Medicine, Sendai, Japan, to work on viruses.

Wayne University: Dr. Carl Djerassi, associate professor of chemistry, department of chemistry; renewal of grant to provide a predoctorate fellowship in organic chemical research.

* * *

The Trustees of what is considered America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "Modern Developments in Anesthesia." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $250 is offered.

For complete information regarding the regulations, write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

* * *

At the close of business for the year 1953, on December 31, 1953, the total enrollment in Michigan Medical Service was 2,973,673 members, an increase for the year of 224,750. This is an increase of 8.179 per cent. On December 31, 1953, Michigan Hospital Service had 3,127,128 members. Fifty-two per cent of MMS members have medical as well as surgical protection.

* * *

The Fourth Commonwealth Health and Tuberculosis Conference will be held at the Royal Festival Hall, London, England, June 21-25, 1955. There will be Lectures, Discussions, Clinical Meetings, Practical Demonstrations, and visits to Sanatoria, Hospitals and Clinics. Address Secretary-General N.A.P.T. National Association for the Prevention of Tuberculosis, Tavistock House North, Tavistock Square, London, W.C.1.

* * *

Gordon B. Myers, M.D., Detroit, conducted a sixteen-hour course on "Electrocardiography" before the Academy of Medicine of Toledo (Ohio) on Tuesdays during July and August.

* * *

The record number of doctors of medicine licensed to practice at the end of 1952 was 218,522.

Of this total, 156,333 were engaged in private practice, 6,677 were engaged in full-time research and teaching or were employed by insurance companies, industries, health departments; 29,161 were interns, residents in hospitals and those engaged in hospital administration; 9,311 were retired or not in practice; and 17,040 were in government service.

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M. W. Jocz, M.D., has been appointed Director of the Medical Department for Chrysler Corporation in Detroit, succeeding John J. Prendergast, M.D., retired.

Dr. Jocz, who has done research and teaching in the field of internal medicine as well as in industrial medicine, joined Chrysler Corporation in 1941 and organized its Diagnostic Division of the Medical Department. He became Assistant Medical Director in 1954.

A native of Detroit, Dr. Jocz was graduated from the Wayne University College of Medicine in 1929 and served his internship and residency at Receiving Hospital. Prior to joining the Chrysler Corporation, Dr. Jocz was in private practice with his wife, also an M.D., the former Teckla Rosenbush.

Congratulations, Dr. Jocz!

* * *

The Arthritis and Rheumatism Foundation is offering the following research fellowship in the basic sciences related to arthritis:

1. Predoctoral fellowships ranging from $1,500 to $3,000 per annum, depending on the family responsibilities of the fellow, tenable for 1 year with prospect of renewal.

2. Postdoctoral fellowships ranging from $4,000 to $6,000 per annum, depending on family responsibilities, tenable for 1 year with prospect of renewal.

3. Senior fellowships for more experienced investigators will carry on an award of $6,000 to $7,500 per annum and are tenable for 5 years.

The deadline for applications is October 15, 1954. Applications will be reviewed and awards made in January 1955.

For information and application forms, address Medical Director, The Arthritis and Rheumatism Foundation, 23 West 45th Street, New York 36, N. Y.

* * *

The Upper Peninsula Medical Society held its 59th annual meeting at Riverside Country Club, Menominee, on June 18-19 and chalked up a record registration of 237.

Under the Presidency of John T. Kaye, M.D., of Menominee, the scientific program presented Adolph Sahs, M.D., of Iowa City, John Schindler, M.D., Monroe, Wisc., Allen C. Barnes, M.D., Cleveland, Joseph W. Gale, M.D., Madison, James Conway, M.D., Milwaukee, E. A. Irvin, M.D., Detroit, E. Richard Harrell, M.D., Ann Arbor, and Harry Beckman, M.D., Milwaukee.

Banquet speakers on Saturday, June 19, included Jean Worth, Editor of the *Menominee Herald Leader*, and Harvey V. Higley, Administrator of Veterans Affairs, Washington, D. C.

A feature of the printed program of the meeting was a page dedicated to the Beaumont Memorial, Mackinac Island, to be dedicated July 17. Wm. S. Jones, Jr., M.D., as Secretary of the 1954 U.P. meeting, developed the interesting and attractive program.

The 1955 meeting will be held at the Gateway, on the Michigan-Wisconsin border south of Watersmeet on June 17-18, 1955, with Paul Lieberthal, M.D., of Ironwood as President.

The President-elect in charge of the 1956 Sault Ste. Marie meeting is Anthony Trapasso, M.D., Sault Ste. Marie.

MSMS Officers at the Menominee meeting included: Councilor W. S. Jones, M.D., Menominee, Councilor B. T. Montgomery, M.D., Sault Ste. Marie, Councilor G. B. Saltonstall, M.D., Charlevoix, and MSMS Executive Director Wm. J. Burns, Lansing.

Michigan Medical Service, sponsors of the reception for President Kaye on June 19, was represented by Louis H. Freye, Muskegon, and Rudolph Bolich, Ironwood.

* * *

"Clinical Services of the Michigan Epilepsy Center" is the title of a booklet available to Doctors of Medicine. Write W. F. Grimshaw at 96 W. Ferry Avenue, Detroit 2, for a copy of this booklet which indicates Outpatient Services, who can be referred, how referral is made, treatment, and fees.

* * *

The American Occupational Therapy Association will hold its 37th Conference at the Shoreham Hotel, Washington, D. C., October 16-22. For program write M. D. Clarke, A.O.T.A., 33 W. 42nd Street, New York 36, N. Y.

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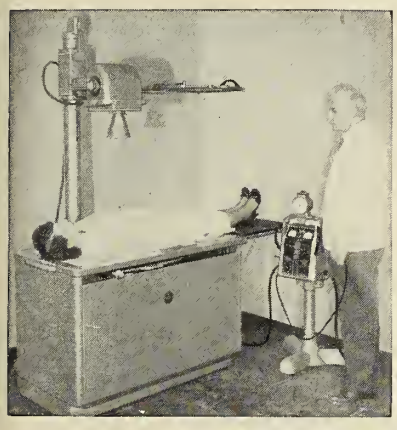
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The National Society for Crippled Children and Adults will hold its annual convention at the Statler Hotel, Boston, November 3-5. For program write: the Society at 11 S. LaSalle Street, Chicago 3, Illinois.

* * *

Prentiss M. Brown, of Detroit, was recently elected a member of the Board of Directors of Parke, Davis & Company, according to announcement made by Harry J. Loynd, P-D President. Former U. S. Senator Brown's election increases the Board to ten members.

* * *

W. H. Huron, M.D., Iron Mountain, and **Wm. A. Hyland, M.D.**, Grand Rapids, served as chairmen of Reference Committees at the recent AMA House of Delegates session in San Francisco. Dr. Huron headed the Medical Education and Hospitals Committee; Dr. Hyland was Chairman of the Committee on Miscellaneous Business.

* * *

The Michigan Branch of the American Academy of Pediatrics will hold a Clinical Conference and academic discussions in Detroit on Tuesday, September 28, 1954, coincident with the MSMS Annual Session.

The Clinical Conference and discussions will be held at Children's Hospital, Detroit, in the afternoon; the evening meeting including reception and a dinner will be held in the English Room of the Sheraton-Cadillac Hotel. The evening session will include the annual business meeting of the Michigan Branch.



E. A. Irvin, M.D., Detroit, became Medical Director of Ford Motor Company on July 1, 1954. Dr. Irvin had been with General Motors Corporation for nineteen years, twelve as Medical Director of its Cadillac Division. He is past president of the Industrial Medical Association (1952-53) and presently is chairman of the American Heart Association Committee on Rehabilitation of Cardiovascular Diseases.

Congratulations, Doctor Irvin!

* * *

Dr. Clarence Cook Little, noted cancer scientist and former University of Michigan President, has been chosen director of the newly-organized Scientific Research Program of the Tobacco Industry Research Committee. Dr. Little is a former President of the American Association for Cancer Research and served as a member of the National Advisory Cancer Council. Besides being President of Michigan (1925-1929), he was President of the University of Maine (1922-25). Dr. Little is now Director of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, one of the world's greatest research centers specializing in genetics. He will continue in that position dividing his time between the Maine laboratory and the work of the Tobacco Industry Research Program.

Say you saw it in the Journal of the Michigan State Medical Society

Richard A. Rasmussen, M.D., Grand Rapids, spoke to the Newaygo County Medical Society in Newaygo on July 8. His subject was: "Differential Diagnosis of Indeterminate Pulmonary Lesions." Dr. Rasmussen represented the Michigan Cancer Co-ordinating Committee.

* * *

The Michigan State Nurses Association celebrates its Golden Anniversary this year. On May 10, 1904, a group of 275 nurses whose aim was better care of the sick through better preparation of the worker, founded the Michigan State Nurses Association. This year, MSNA comprises more than 7,000 professional nurses. It is planned at the annual convention to honor with appropriate ceremonies the courageous women to whose efforts—fifty years ago—today's nurses are so profoundly indebted for the benefits they now enjoy.

Congratulations, Michigan State Nurses Association!

* * *

The Ohio Academy of General Practice meets September 22-23, at the Deshler-Hilton Hotel, Columbus.

* * *

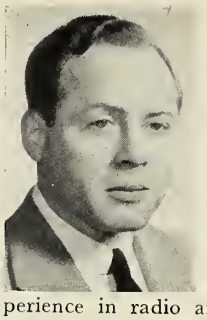
The Basic Science Board reports that the following states have been approved for waiver of taking basic science examinations: Arkansas, Colorado, Minnesota, Nebraska, Oklahoma, Rhode Island, South Dakota, Tennessee, and Texas.

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Mr. Harry R. Lipson, a close friend of MSMS and well known to many members as former publisher of the *Detroit Medical News,* is now vice president in charge of all sales activities and assisting managing director of WJBK, Detroit, in both its radio and television operation.

In his twenty-nine years' experience in radio and television sales, public relations, and newspaper and magazine advertising, Mr. Lipson has gained the well-deserved and enviable reputation as one of the Midwest's most outstanding and respected sales representatives.

He has been associated with WJBK-AM and TV for almost six years Mr. Lipson is active in the affairs of the Adcraft Club of Detroit.

* * *

Pending is approval for the following states: District of Columbia, Florida, Nevada, New Mexico, Alaska.

The following states are not approved: Arizona, Connecticut, Iowa, Oregon, Washington and Wisconsin.

Prior to 1954 Legislative amendment to Basic Science Act, as sponsored by the Michigan State Medical Society, only three states had reciprocal arrangements with the Michigan Basic Science Board.

* * *

Horace Wray Porter, M.D., Historian of the Class of 1919, University of Michigan Medical School, reports that the reunion of June 11 at Barton Hills, Ann Arbor, twenty-nine of the forty-two living members of the Class were on hand. The original freshman class listed 112 students, of which fifty-six graduated. Fourteen have died.

Fourteen classmates who are now members of the faculty, were guests at the June 11 dinner.

* * *

The University of Illinois College of Medicine announces its Annual Assembly in Otolaryngology from September 6 to 11, 1954. The entire week to be devoted to surgical anatomy and cadaver dissection of the head and neck, and histopathology of the ear, nose and throat.

For information write to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

SOME COMMENTS RE THE MAY, 1954, NUMBER OF JMSMS

"Thank you very much for the complimentary copy of THE JOURNAL of the MSMS. I think your idea of a "panel by mail" was an excellent one for dealing with such a multi-faceted problem as preventive geriatrics. You invite suggestions for further development of the idea in the coming months and I am appending them here. . . ." STEPHEN C. CAPPANNARI, Assistant Professor of Anthropology, Wayne University.

* * *

"We enjoyed reading your interesting report and discussion on Preventive Geriatrics as presented in the



May, 1954 issue of THE JOURNAL of the Michigan State Medical Society. . . ." FREDERICK F. YONKMAN, M.D., Ciba Pharmaceutical Products, Inc.

* * *

". . . My sincere congratulation to you both. In all of the literature on this subject I have not seen anything that can compare with it. . . ." C. D. SELBY, M.D., Port Huron, Michigan.

* * *

". . . I am writing at once to congratulate you. . . . The entire piece represents only the most forward-looking approach to the entire matter of prolongation of health and energy in the later years. It should have a tremendous impact upon those who will take the time to read it. . . ." CLARK TIBBITS, Chairman, Committee on Aging and Geriatrics, Department of Health, Education, and Welfare, Washington, D. C.

* * *

"This is just a brief note to tell you that I thought your Committee's Michigan State Medical JOURNAL piece on 'Preventive Geriatrics' very well done. I received a copy a week or so ago and read it with great interest. It was an excellent idea, I thought, to bring together so many points of view. This should be a real reference piece and will help persons concerned with studying the problems of older people." HARRY BECKER, Chicago, Illinois.

* * *

". . . This is an interesting symposium and does put together an interesting series of comments by an interesting collection of people. I'm sure this is a contribution to the preventive aspects of geriatrics which is, after all, the one in which we are or should be most interested." OLLIE A. RANDALL, Consultant on Services for the aged. Community Service Society, New York, N. Y.

* * *

"I cannot begin to tell you with what interest I read the material on Preventive Geriatrics contained in the May number of THE JOURNAL of your State Medical Society which you were good enough to send on at my request. The material seems to me extremely pertinent and telling for all of us who are working in community organization to improve the status of and services to our aging population. I will be looking forward greatly to future geriatrics numbers of THE JOURNAL and hope that my name may be put on your mailing list for these." MRS. ROBERT D. FIELD, Director, Health Division, Council of Social Agencies, New Orleans, Louisiana.

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June 13	Sunlight Walter D. Block, Ph.D., Ann Arbor H. Richard Blackwell, Ph.D., Ann Arbor
June 20	Care of the Skin Loren Shaffer, M.D., Detroit A. E. Schiller, M.D., Detroit
June 27	Highway Accidents and First Aid Corporal Michael Sibal, Detroit Louis Kaufman, M.D., Detroit

BRITONS BUY HOSPITAL INSURANCE

British insurance men are puzzled. They are being swamped with applications for hospital insurance, a type of policy which they assumed would vanish when the socialist government set up the nationwide "free" medical service seven years ago.

"We can't understand it," an insurance man said. "It doesn't make sense that people who can get hospital care for nothing should buy hospital insurance. The only possible explanation is that people are dissatisfied with government medicine and want to provide their own medical care."

A survey revealed the surprising fact that half a million Britons are covered by hospital insurance policies taken out since socialized medicine began.

Most of the policies have been issued in the last two years and the pace is increasing. More policies were taken out in May than in all of 1947.

About a third of the insurance buyers are obtaining it under group policies. Ironically, one of the biggest groups seeking private hospital care is made up of 1,500 employes of the government-owned British Broadcasting Corp.

Britons buying the insurance complain that as government patients they must wait weeks and often months to get hospital care classed as not urgent and then they cannot select their surgeons or other specialists. As private patients they get immediate treatment and choose their doctors.

The insurance patients get most treatment for serious ailments in government hospitals which set aside 6,000 of their 200,000 general treatment beds for patients who pay their own bills. Since the government took over almost all large hospitals, the charges for private patients have increased by more than 50 per cent.

For less serious ailments, insurance patients are sent to private nursing homes which, under government medicine, have lost many of their former patients to large government hospitals. The nursing homes have plenty of beds available.

Hospital-insurance costs vary, by age, from $12 to $30 a year for single persons and from $35 to $60 a year for persons with families.—*Chicago Tribune* Foreign Service.

Editor's Note—About a month ago, we published another clipping about socialized medical service as it is not operating satisfactorily in Great Britain.

HIGH FINANCE

In view of the proven unreliability of America's so-called "Allies" in the world conflict with International Communism, it is disconcerting to realize that this country's total grants of foreign aid since World War II now exceed the total aid given our Allies during the war years 1941-45 inclusive.

According to data gathered by Paul Peters, a reliable Washington analyst of government spending, the total grants, credits and cash expenditures to foreign countries from the United States Treasury during the fiscal years 1941 to 1945 were $59,869,639,312.

The total grants, credits and cash expenditures to foreign countries from the United States Treasury, starting with fiscal year 1946 and through May 15, 1954, have been $62,817,358,188. Included in this amount is $3,385,000,000 in American payments to the International Bank and Monetary Fund.

In other words, the United States give-away to foreign countries since the end of World War II now exceeds by nearly $3 billion the amount of foreign aid this country gave to help defeat the Axis powers in that war.

Obviously the United States, in its vast postwar foreign aid, has "bought" neither peace, security, friends nor reliable allies.

Even more ironical is the fact that the aid given Russia during the war, together with American diplomatic fumbling since World War II, contributed substantially to building up the Soviet menace which Americans have spent over $60 billions in foreign aid ostensibly to combat—plus the billions more spent to build up our own defenses and to wage the inconclusive Korean war.

In gauging the extent of the American give-away program since 1941, it should also be noted that American taxpayers have an additional burden of $18,606,524,210 in interest which the United States Government has paid or must pay on the money it borrowed to finance the foreign give-away program.

Thus, the total cost of that program since 1941 has been over $141 billion—less a total of $10,261,625,746 in wartime and postwar repayments (including reverse lend-lease) made by the countries receiving the foreign aid. The net cost, therefore, has been more than $131 billion.

I have consistently opposed the postwar foreign aid programs and I believe events have fully vindicated my position.

Despite this record of foreign aid spending, Congress is being asked to authorize and appropriate another $3½ billion for foreign aid for fiscal 1955. This request is being made even though the unexpended balances to the credit of the Foreign Operations Administration at present total more than $10 billion.

It is impossible for me to go along with this request.—Congressional letter from *Paul Shafer,* Congressman 3rd District, Michigan.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

REVIEW OF PHYSIOLOGICAL CHEMISTRY. By Harold A. Harper, Ph.D., Professor in Biochemistry, University of San Francisco; Lecturer in Surgery, University of California School of Medicine, San Francisco; Biochemist Consultant to Metabolic Research Facility, U. S. Naval Hospital, Oakland Biochemist Consultant to St. Mary's Hospital, San Francisco. Fourth edition. Los Altos, California: Lange Medical Publications, University Medical Publishers, 1954. Price $4.00.

The reviewer has had the opportunity to opine on one of the previous editions of this excellent synopsis and finds the current one maintains the usual high standards. The chapter on amino acids is very good and the comprehensive explanation and evaluation of liver function tests can be read with profit by any clinician. The sketches, such as those dealing with kidney function, are simple, but effective. Despite the condensed character of the text, it is easy to read and lucid. It is particularly recommended to physicians who are preparing for state board or specialty examinations.

A.A.H.

SEVENTY-FIVE YEARS OF MEDICAL PROGRESS, 1878-1953. Edited and with a Foreword by Louis H. Bauer, M.D., F.A.C.P., Secretary-General, The World Medical Association; Past-President, The American Medical Association. Philadelphia: Lea & Febiger, 1954. Price $4.00.

The first western hemisphere conference of the World Medical Association held in Richmond, Virginia, in April, 1953, had as its main theme the history of medicine during the past seventy-five years. Leaders in each of the nineteen specialties and a member of the American Academy of General Practice were asked to present a history of their specialty and its present attainments. These papers are the text of this present work, and they make a unique survey of the practice of medicine.

Two Michigan men were honored in the compilation of this work, Leo H. Bartlemeier, M.D., of Detroit, and Louis J. Hirschmann, M.D., formerly of Detroit. Both articles are well presented and give a picture of the growth of medicine unseen anywhere else. Louis Hirschmann comments: "One fact which has contributed to the higher plane of successful medical treatment is the freedom and willingness with which all medical practitioners confer with one another, with the result that the patient of today is living longer, feeling better, and has greater future prospects than ever before."

WHAT TO DO UNTIL THE PSYCHIATRIST COMES, with a special supplement on HOW TO KILL A WORRY. By Murray Banks, M.D. Brooklyn, New York: The Institute Press (604 E. 24th Street), 1954.

This brochure is a happy mixture of common sense and humor. There are thirty subjects on psychological problems (one a day for a month). These articles are captioned with attention-gaining headlines, such as "Is your mind in low gear?" "Live one day at a time" and "When you reach a tired spot in life." The author ends each chapter with a thought for the day and a joke that appropriately emphasizes the points presented. He is attempting to help the reader take a more optimistic attitude regarding life's situations. It appears excellent reading matter for the physician's waiting room; that is, if the booklet is not too quickly appropriated by some patient who fails to return it.

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(Continued from Page 848)

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Nicholas E. Lanning, Grand Rapids; Morris Raskin, Detroit; Wm. A. Bailey, Redondo Beach; Wm. R. Chynoweth, Battle Creek; J. S. DeTar, Milan; Ira G. Downer, Detroit; G. B. Goddard, Pickford; Marvin R. Hannum, Milan; John F. Itzen, South Haven; Robert G. Laird, Grand Rapids; F. L. Troost, Holt.

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* * *

Although surgical techniques have been greatly improved, the present yearly salvage of cases of carcinoma of the lung is barely five per cent.

* * *

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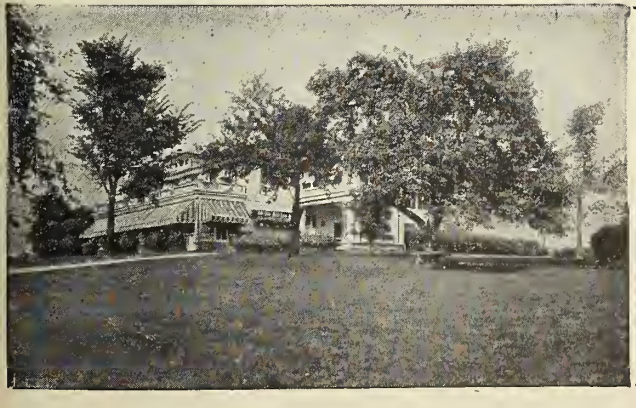
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*Straub, L. R., p. 131, Cecil's, "The Specialties In General Practice," W. B. Saunders, 1952.

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(1) Kirby, W. M. M.; Waddington, W. S., & Doornink, G. M.: Antibiotics Annual, 1953-1954, New York, Medical Encyclopedia, Inc., 1953, p. 285.
(2) Finland, M., & Haight, T. H.: *Arch. Int. Med.* **91**:143, 1953.



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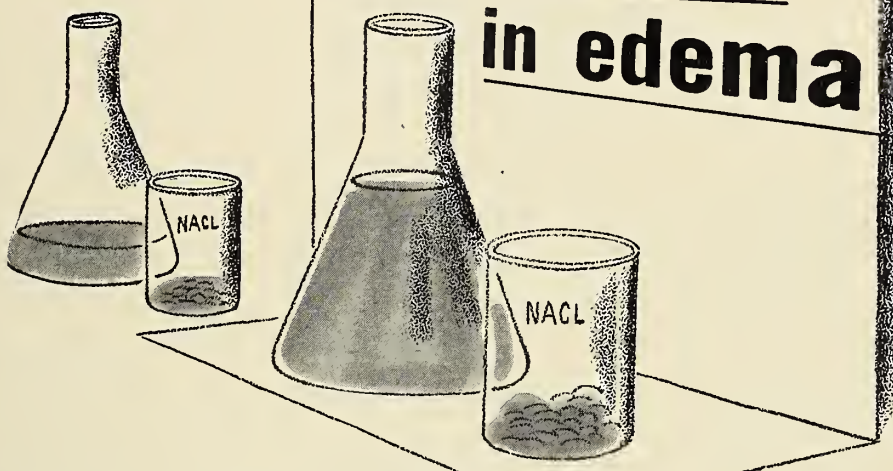
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2. Brown, W. E., and Sutherland, C. G.: Control of Edema in Pregnancy. *GP*, 8:65, Nov., 1953.

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1. Shuman, C. R., and Wohl, M. G.: Nutritional Aspects of Heart Failure, J. Clin. Nutrition 2:5 (Jan.-Feb.) 1954.

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HIGHLIGHTS OF MIDSUMMER SESSION OF THE COUNCIL
July 15-16-17, 1954

A total of ninety-seven items was considered by The Council at its three-day Midsummer Session. The twenty-five members of The Council were in session fifteen hours and twenty-nine minutes—a cumulative total of 387 hours or better than nine and one-half working days (on the basis of forty-hour week). Chief in importance were:

- **Beaumont Memorial Dedication.**—The report of the Beaumont Memorial Committee, headed by Otto O. Beck, M.D., indicating that all matters were in readiness for the Dedication of July 17, 1954, was presented and approved. Chairman Beck stressed the need for additional contributions to cover the deficit resulting from the cost of the Memorial and its furnishings: this appeal was ordered placed in the next Secretary's Letter to all members.
- **President Hull** presented the gift of John Hopkins, D.D.S., of Detroit—Paul Revere's dental instrument—for display in the Beaumont Memorial.
- **Joint meetings** were held with the Board of Trustees of the Michigan Hospital Association; with the Michigan Crippled Children Commission; with the Executive Committee of Michigan Health Council; and with Michigan Hospital Service Board of Trustees plus Michigan Medical Service Board of Directors and guests together with the latter's Wayne County Medical Advisory Committee; matters and problems of mutual interest were discussed.
- **The Council** was informed that television would be featured at the 1955 Michigan Clinical Institute (next March in Detroit) through the cooperation of Smith, Kline, & French Laboratories of Philadelphia.
- **Committee Reports**—The following were given consideration: (a) Medical Advisory Committee to Michigan Hospital Service, meeting of June 10; (b) Advisory Committee to Michigan State Medical Assistants Society, July 11; (c) Committee on Study of Group Health and Accident Insurance, July 15; (d) Geriatrics Committee, June 29; (e) Liaison Committee with Michigan Medical Service, July 17; (f) Committee on Awards, July 17. Also presented was a report on the AMA San Francisco Session (June 1954) by William A. Hyland, M.D., Grand Rapids, Chairman of the Michigan Delegation.
- **Gordon H. Scott, Ph.D.,** Dean of Wayne University College of Medicine, was appointed to the MSMS Scientific Radio Committee upon recommendation of the Committee's Chairman John M. Sheldon, M.D., of Ann Arbor.
- **Treasurer's Report** as of July 8, 1954, was presented by William A. Hyland, M.D.
- **Legal Counsel J. Joseph Herbert** presented an opinion on the legality of blood alcohol tests for intoxication.
- **Public Relations Counsel Brenneman** presented report on Good Citizenship Campaign; publicity for Beaumont Memorial Dedication, including University of Michigan motion picture and cooperation; Michigan State Medical Society exhibit at Michigan State Fair; Annual Session publicity; and plans for the 1955 Michigan Rural Health Conference.
- **The report of the Publication Committee of The Council** included (a) a recommendation that approval of advertising copy by the AMA State Journal Advertising Bureau is ipso facto approval by MSMS; also (b) proposed schedule of numbers for JMSMS through May, 1956.
- **The Finance Committee of The Council** report included a reaffirmation of its policy of investing MSMS monies only in government securities; it also recommended a vote of thanks to Parke, Davis & Company, Detroit, for wonderful help in connection with the Beaumont Memorial and in printing two invitations for the Dedication.
- **The report of the County Societies Committee** of The Council included selection of four names for Michigan's Foremost Family Physician for 1954, to be presented to The Council in September, with three to be presented to the House of Delegates; also recommendation that a prize be offered to the component county medical society with the largest percentage of attendance at 1954 Annual Session.
- **The Annual Report of The Council** was approved and referred to the MSMS House of Delegates.
- **Matters of mutual interest** were discussed with A. E. Heustis, M.D., Michigan Health Commissioner, including Synnematin, the newly-developed antibiotic for typhoid fever; also list of certified hospitals; definition of a hospital; multiple screening; and narcotic addicts.
- **Resolution commending Mr. Donald E. Johnson** of Flint for his cancer control activities was approved and referred to the MSMS Committee on Special Memberships for consideration by 1954 House of Delegates.
- **Council Chairman William Bromme, M.D.,** reported that the Midwest Medical Society

(Continued on Page 960)

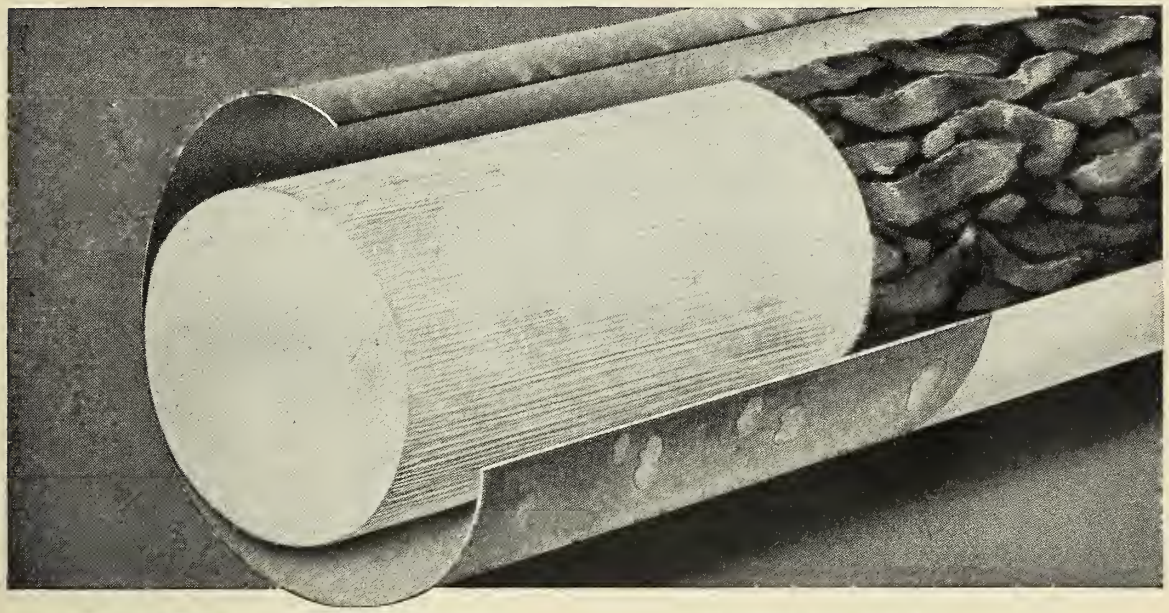
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Mrs. Elizabeth E. Peck

Career: Medical Assistant

To start from the very beginning, we must go back to the wee hours of a March 25 not too many years ago, and visit a small cottage in Painesdale, a mining community up in the Copper Country.

"All the disappointments my mother had in life up to that date were minimized when she took her first look at me," Elizabeth Peck smilingly relates today. "A wrinkled little specimen with a head the size of a teacup was all she had to show for her long months of waiting."



There had been two other children, a brother fifteen years earlier, and a sister three years before.

Elizabeth's mother had been a practical nurse prior to her marriage. She dropped her profession reluctantly, but her maiden name of Emma Whinnen she gladly gave up to marry John Goodfellow—best known as Jack—who was a toolmaker for the copper mines.

The Goodfellows moved to Detroit three years after Elizabeth's birth, and seven years later Mrs. Goodfellow went back to nursing—her first love—for as long as her health permitted.

Continuing her story, Elizabeth Peck says: "Not having been born with the proverbial silver spoon in our mouths, it was necessary that all of us pitch in. At the age of twelve, I took a full-time job in a restaurant evenings while going to school days. Most people are appalled at this, but their pity is wasted; I enjoyed every minute of it and have always felt that it in no way did me any great harm."

Graduating from Hazel Park High School at the tender age of fifteen, and small in stature to boot, Elizabeth set out to make her mark as a secretary. Her sister was the one who had been earmarked to carry on the family tradition of nursing.

However, an unfortunate accident ended the dreams of Elizabeth's sister. Thereupon, encouraged by her mother's disappointment, Elizabeth gave up the secretarial job which she had held for three years with Studebaker Corporation and applied for nurse's training at St. Joseph's Mercy Hospital.

"Here I entered training, in the time of the Depression, and here I learned of the honor, the courage and the unselfishness of the professional world around me," she remembers.

The next event of importance in her life was her marriage to Mr. George H. Peck.

"We followed the same pattern of all the young people who were trying to establish a home in the middle '30s", Mrs. Peck recalls today. "The Depression had us all trimmed lean by that time; but if money was scarce, time was not.

"I really believe that we had more pleasures from our home and our friends than we do today." In 1936, the marriage was blessed with a daughter, Valerie Ann, ending for the time Mrs. Peck's career in nursing. When the demand for nurses became great in 1940, however, she returned to the work she loved, leaving her daughter in the capable hands of her mother for care.

This time, Mrs. Peck chose to work in the office of a general physician in Detroit, who "was a wonderful teacher and stimulating to work with."

"It was in his office that the term 'medical assistant' began to mean more to me than it had ever meant before," Mrs. Peck says. "For the first time, I realized how important the only girl in a doctor's office can be."

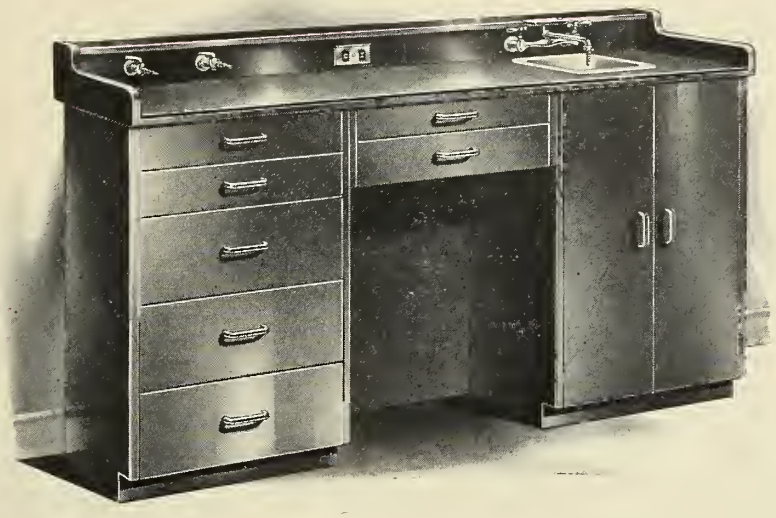
Later came summer relief work for another doctor of medicine, where Mrs. Peck learned laboratory work. For the past five years, she has been with a Detroit dermatologist and syphilologist.

"I have been most fortunate in that all the doc-

(Continued on Page 950)

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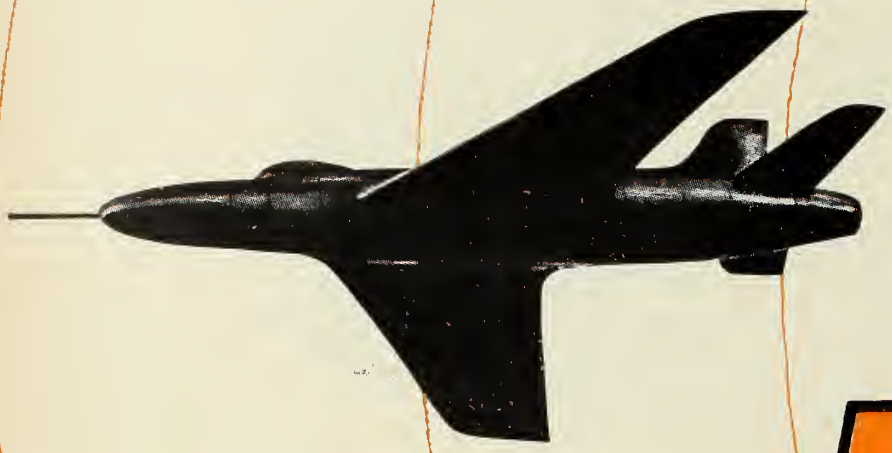
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*REG. U.S. PAT. OFF.

MRS. ELIZABETH E. PECK

(Continued from Page 946)

tors I have worked for have been good teachers," she says. "They have all been willing to explain and answer questions, regardless of how busy they may have been."

Mrs. Peck's activities are many and varied. She loves to entertain, and she likes especially to have young people around her. She has taught Sunday School for eleven years in a Baptist Church and served as director of youth activities there. She loves to sing, and has a pleasing voice, but has never gone at it too seriously.

"I have always loved to dance, but strange as it may seem, next to dancing I like to do carpenter work," smiles Mrs. Peck. "My father and I have built two homes all alone—one at a time when he had lost the vision of one eye and I had to be his eyes and hands."

Her interest, her enthusiasm, her understanding of the importance of the medical assistant, started Mrs. Peck early toward leadership in the Michigan State Medical Assistants Society. She first became a member of the Detroit Medical Assistants Society in 1949, serving immediately as Recording Secretary and moving to the office of Treasurer of the state organization the next year. She has served on the Board of Directors of MSMAS ever since, acting as President of the organization throughout most of 1952-53, then fully assuming that post for the year 1953-54.

Mrs. Peck's daughter Valerie—heir-apparent to the family dreams—never leaned toward the medical profession until she put in considerable time as receptionist in the same office with her mother. "But," says Elizabeth Peck with a knowing look, "There is still a chance that the 'nursing bug' which bit first my grandmother, then my mother—and finally, me—will still have a nip at my daughter."

"A doctor who orders everything in the book for a patient just because his Blue Cross contract covers it is like the fellow who goes to an American plan hotel and eats everything on the menu.

In either case, indigestion results, and the supplier suffers a loss."—JOHN H. HAYES in *Hospitals*, February, 1954.

* * *

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126 North Washington Avenue
Tel: 3-8561

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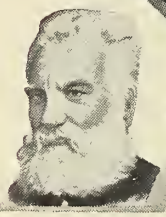
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Heart Beats

ANNUAL MEETING OF AHA COUNCIL FOR HIGH BLOOD PRESSURE RESEARCH

The Annual Meeting of the American Heart Association's Council for High Blood Pressure Research has been scheduled for Friday and Saturday, October 22 and 23, in Cleveland. The subject of the scientific program will be the metabolism of muscles and nerves as it relates to high blood pressure. Irving S. Wright, M.D., New York, Past President of the Association, is Chairman of the Program Committee. The general program will feature a discussion on problems of retirement.

MHA TO SPEND $96,000.00 ON HEART RESEARCH

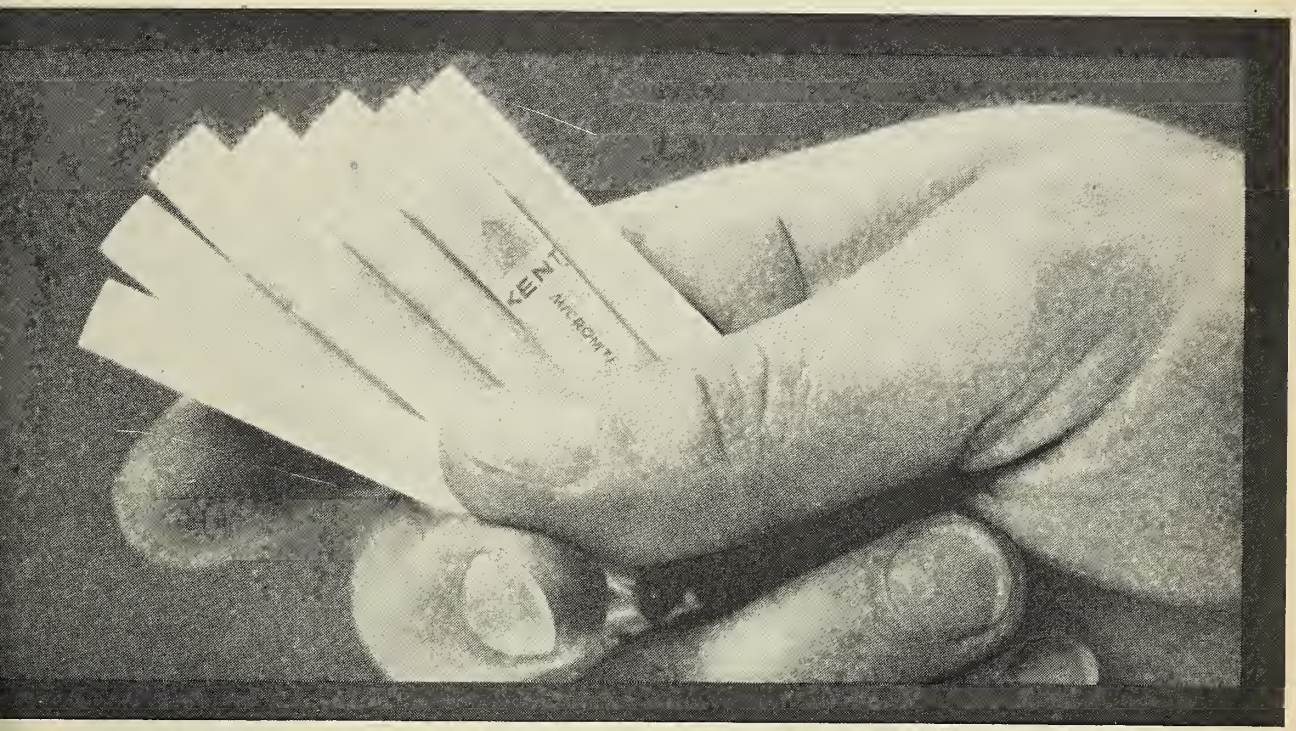
The continuing battle against diseases of the heart and blood vessels received added support

(Continued on Page 954)

MHA GRANTS ON HEART RESEARCH

Name	*Institution*	*Title of Project*
L. T. Iseri, M.D.	Wayne University, College of Medicine, Detroit	Fluid and Electrolyte Metabolism in Edema Formation Due to Cardiac and Renal Causes
H. K. Hellems, M.D.	Wayne University, College of Medicine Detroit	Investigation of the Effects of Exercise and Commonly Used Cardiovascular Drugs on Myocardial Blood Flow and Metabolism in the Human Subject
A. J. Boyle, M.D.	Wayne University, College of Medicine Detroit	Plasma Colloid Stability in Normal and Atherosclerotic Subjects
F. D. Dodrill, M.D.	Harper Hospital Detroit	Mechanical Heart Project
J. L. Wilson, M.D.	University of Michigan, Dep't of Pediatrics, Ann Arbor	Investigation of the Effects of Cyanotic Heart Disease and Its Relief on Cerebral Function
Conrad R. Lam, M.D.	Henry Ford Hospital, Detroit	Chemotherapy of Rheumatic Fever
S. W. Hoobler, M.D.	University of Michigan Dep't of Internal Medicine Ann Arbor	Experimental and Clinical Study of the Physiologic Effects of Valvular Prosthetics and Hypothermia Upon the Circulation
D. Bohr, M.D.	University of Michigan Dep't of Physiology Ann Arbor	Arterialization of the Coronary Sinus by Communication to the Left Ventricular Cavity
J. A. Johnston, M.D.	Henry Ford Hospital, Detroit	Investigation of the Mechanism of Blood Coagulation with Special Reference to the Problems of Thromboembolic Disease
Cameron Haight, M.D.	University of Michigan Dep't of Surgery, Ann Arbor	A Study of Serum Tension in Atherosclerosis
T. M. Brody, M.D.	University of Michigan Dep't of Pharmacology Ann Arbor	Blood Coagulation: Purification of Inhibitors and Mechanism of Their Action
N. E. Clarke, M.D.	Providence Hospital, Detroit	Experimental Cardiovascular Surgery
Prescott Jordan, M.D.	Wayne University, College of Medicine Detroit	Studies in Hypertension
J. D. Fryfogle, M.D.	Mt. Carmel Hospital, Detroit	Further Studies Dealing with the Terminal Vascular Bed and the Renal Vasoexcitor Material and A Study of the Mechanism Responsible for Endogenous Control of Renal Vascular Resistance
I. F. Duff, M.D.	University of Michigan, University Hospital, Ann Arbor	Nutritional Studies in Rheumatic Fever
J. J. Jasper, M.D.	Wayne University, College of Medicine, Detroit	Cardio-Respiratory Function Before, During and After Thoracic Operations on Patients with Pulmonary or Cardiac Disease
W. H. Seegers, Ph.D.	Wayne University Dep't of Physiology & Pharmacology, Detroit	Metabolic Effects of the Cardiac Glycosides on Heart Mitochondria

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MHA TO SPEND $96,000 ON HEART RESEARCH

(Continued from Page 952)

recently with the announcement by Frank Van Schoick, M.D., Jackson, President of the Michigan Heart Association that the Association has awarded more than $96,000.00 to seventeen heart research projects to be conducted in Michigan during the next twelve months. This is the sixth year that research grants have been made by the Association from funds it receives from "United" fund-raising campaigns in many Michigan communities.

"These research awards bring to nearly $500,000.00 the total that the Association has provided for this purpose in Michigan in the six years since it became a voluntary health agency," said Dr. Van Schoick. "However, despite remarkable advances which have been made in treating heart diseases during recent decades, we are still a long way from knowing how to prevent or control America's leading cause of death. A vastly greater research effort is needed. This is a challenge not only to the medical profession and the research scientists but to the public, the ultimate beneficiary, from whom support for this work must eventually come."

In addition, two awards totaling $13,450.00 have been made to research investigators in Michigan under the national research support program of the American Heart Association. This brings to $109,630.00 the total which will be spent in Michigan to underwrite an intensive scientific attack on diseases of the heart and circulatory system. The American Heart Association is financially supporting 169 awards totaling more than $953,000.00 during the next fiscal year.

Of the research funds allocated by the Michigan Heart Association, $24,350.00 have been awarded from the Association's Memorial Fund. This Fund was established at the request of many persons who have wanted an opportunity to provide a "living memorial" to the memory of a friend, relative or associate who has been afflicted with heart disease. Dr. Van Schoick pointed out that memorial contributions are used exclusively for heart research studies.

The Michigan Heart Association has also allowed six researchers to retain a total of $5,634.76 from grants made in previous years in order that they may complete their research studies.

Much of the research to be undertaken under the state and national grants is of a fundamental, long-range character, seeking to clarify many little understood biological mechanisms which have a bearing on the way the heart and blood vessels function in health and disease. Some projects are concerned with the chemical, metabolic and electrical processes involved in heart muscle contraction—the pumping action through which the body is supplied with blood. Other projects will explore such subjects as the nature of blood clotting, the role of various glands in maintaining or raising blood pressure, and the ways the kidneys function (damage to the kidneys is often associated with cardiovascular diseases).

Several other studies supported by the new awards concern rheumatic fever. New diagnostic techniques and the evaluation of new drugs are the subject of other projects. Further testing will be given a mechanical heart and an artificial kidney as possible aids to research and surgery within the heart. Also in the field of surgery are projects to evaluate the long-term results of heart operations and to study the effects upon the heart and blood vessels of refrigeration techniques used to slow down bodily processes while surgery is carried out.

Michigan Heart Association grants have been made to the projects named in the accompanying list.

Michigan researchers who are retaining funds from previous grants are: N. L. Avery, M.D., Blodgett Memorial Hospital, Grand Rapids; E. H. Drake, M.D., Henry Ford Hospital, Detroit; F. D. Rights, Ph.D., Wayne University, Detroit; J. L. Blodgett, M.D., Grace Hospital, Detroit; and R. A. Gerisch, M.D., Harper Hospital, Detroit.

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Signs of vestibular damage appear in cats treated with Distrycin as much as 100 per cent later than in animals given the same amount of streptomycin.



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Streptomycin	12	6	18
Dihydrostreptomycin	6	0	6
Distrycin	0	0	0

	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

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AMA Washington Letter

THE MONTH IN WASHINGTON

While Congress didn't enact all the health bills President Eisenhower's administration wanted to put through, it did mark up an imposing record of accomplishment. In fact it passed more health and medical legislation than any Congress in many, many years. The AMA actively supported most of the bills finally enacted, and opposed none of them.

Four important new laws were written into the statutes before the session ended—expansion of the Hill-Burton hospital construction program, expansion of the vocational rehabilitation program, amendment of the income tax law to allow more liberal deductions for medical expenses, and transfer of the responsibility for health of the Indians to U. S. Public Health Service.

For years a group of state health officers have been working to bring about the transfer of Indian hospital and medical service from the Indian Bureau in the Department of the Interior to Public Health Service in what is now the Department of Health, Education, and Welfare. The health officers could show beyond any question that the Indians were receiving far less medical care than the rest of the population. They maintained that if the Public Health Service were made responsible for the Indians' health, there would be a rapid change for the better on the reservations.

What might be called governmental inertia succeeded in holding up the legislation for a time, but this Congress decided to make a shift. Public Health Service, which will take over on the reservations next July 1, already has plans under way to insure the Indians more and better medical care.

The demands for a more dynamic vocational rehabilitation program have been building up outside the federal government as well as in Washington. The problem facing this administration was to get more people rehabilitated but at the same time to induce the states to take a more active part in the work. The law now enacted promises to do this. It authorizes gradual increases in the federal appropriations, but at the same time is aimed at bringing the states up to the position of full financial partners by the end of five years. The goal is to rehabilitate at least 200,000 persons annually, in place of the present 60,000.

If local communities are willing to raise from one-third to one-half of the cost, the new Hill-Burton program should result in the construction, within three years, of possibly a half billion dollars in new facilities—rehabilitation centers, diagnostic-treatment clinics, chronic disease hospitals, and nursing homes. (This program was discussed in detail last month in this space.) The new construction will be in addition to the continuing Hill-Burton grants for complete hospitals.

On the medical cost deduction question, too, economists long have felt that families with unusually large medical expenses should be given more liberal tax deductions. The new law will allow them to deduct medical expenses in excess of three per cent of taxable income. Under the old law the figure was five per cent. A $3,000-income family with $150 in medical expenses under the old law could deduct nothing, but under the new law $60. The Treasury estimates that the total saving to families will be $30 million.

The general public probably read and heard more about the one bill that was defeated—reinsurance—than it did about all the health and medical legislation that passed. That defeat (in the House) was a surprise and a disappointment to the President. His advisors might have told him that all was not well, but obviously they did not. Opposition was not confined to the AMA. Also lined up against it were most of the health insurance companies, the U. S. Chamber of Commerce and a number of other professional groups. The labor unions would accept it, but wouldn't work to get it. Most significant of all, it had lukewarm support at best from the lawmakers who know most about it, the Senate and House committees that conducted the hearings.

Squamous-cell carcinoma in lymph nodes is more resistant to irradiation, as a rule, than the primary site.

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Blue Shield-Blue Cross Non-Group Enrollment

Michigan Blue Cross-Blue Shield is holding its fourth state-wide non-group enrollment campaign during the first two weeks in October.

For that period (October 3-16), and for that period only, enrollment under the non-group program will be open to any resident under sixty-five. Only condition is that married persons must enroll spouse and unmarried children under nineteen years of age. The spouse, however, can be over sixty-five.

Through this special program, Blue Cross-Blue Shield is able to extend an opportunity for coverage to the tens of thousands of Michigan people who cannot join through regular employe, farm or professional groups.

Naturally, it is not possible in a non-group, individual enrollment program to offer all the advantages of comprehensive group coverage. However, because there is this limited enrollment period, Blue Cross-Blue Shield is able to offer a good many of the broad benefits of group coverage.

Again this year, as in the past, Michigan doctors hold the keys to the success of this enrollment campaign, Dr. Robert L. Novy, president of Michigan Medical Service, declared in a special statement.

"The success of the non-group program lies largely in the hands of the doctors of Michigan," Dr. Novy said.

"The campaign will get wide publicity and will be backed with advertising, of course. But we have found in the past that enrollment really hinges on the cooperation of the physicians. In the areas where the doctors were most active in backing the drive, enrollment was markedly higher.

"In all three of the previous non-group enrollment campaigns, the physicians have played a big part," Dr. Novy continued. "The bulk of inquiries came from cards obtained at doctors' offices or hospitals. That is why I'm stressing the key role all Michigan physicians play in non-group enrollment."

He pointed out, for example, that if every physician in the state obtained only ten non-group applicants, almost 100,000 people, including dependents, would be added to Blue Cross-Blue Shield membership this fall.

Enrollment under the program is completed entirely by mail. No physical examination or health statement is required.

Even chronic and pre-existing conditions will be covered after the contract has been in effect six months. Only other waiting periods are nine months for maternity benefits and six months in the case of removal of children's tonsils and adenoids.

All other conditions are covered right from the date the contract becomes effective.

Those who wish to enroll merely fill out and mail the special "inquiry" card available in doctors' offices, hospitals and in the form of a coupon in newspaper advertisements.

Blue Cross-Blue Shield then returns an application card and complete instructions together with a folder explaining the rates and benefits in detail.

To be eligible, the "inquiry" card must be postmarked no later than October 16, deadline for the enrollment period.

All doctors have received a small initial supply of "inquiry" cards, together with a convenient order blank card which they should mail in promptly to obtain all the additional cards they may need.

HIGHLIGHTS OF MIDSUMMER SESSION OF THE COUNCIL

(Continued from Page 944)

Executives Conference (Michigan, Ohio, Indiana, Wisconsin, Illinois and Kentucky) would hold its 1954 meeting in East Lansing, Michigan, on November 20.

- **The Council adopted a motion** recognizing the trends in the supervised training of practical nurses and their valued services to the public, urging that the extension of such training programs be encouraged.

"MEDIC" SERIES BROADCAST

The first program of the "MEDIC" series sponsored by the Dow Chemical Company of Midland, Michigan, with full endorsement and supervision of program by the Los Angeles County Medical Association was broadcast on September 13, 1954. You are urged to watch this program on Monday evenings over NBC-TV, 9:00 p.m. EST. Each case tells the story of treatment of a patient by a doctor.

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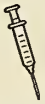
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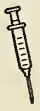
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PR REPORT

THE OBSOLETE CORONER SYSTEM is out the window in St. Joseph County, and citizens there will now be protected by a modern and efficient Medical Examiner System, chiefly because the St. Joseph County Medical Society recognized a community need—then *did* something about it.

Establishment of the Medical Examiner System was approved by voters of the county in the August 3 primary elections. Leading up to the election was a three-month educational campaign which reached its peak only a few days before the primaries in an intensive series of newspaper advertisements and radio spot announcements.

The county society, however, began its activities 10 months in advance. Early last fall, well before the new Medical Examiner Act became effective on January 1, 1954, leaders of the St. Joseph County Medical Society began laying the groundwork, gathering facts and making initial contacts. First to be consulted was MSMS, whose PR Department produced materials and information requested by the county society.

IN EARLY MAY, four members of the County Medical Society appeared before the St. Joseph County Board of Supervisors to explain the importance of the Medical Examiner System and the inadequacies of the age-old Coroner System. The Board of Supervisors promptly and unanimously adopted a resolution placing the proposal on the August 3 ballot.

Immediately thereafter—aided by additional factual matter supplied by MSMS—the County Medical Society set up a speakers' bureau, enlisted the aid of other community groups, and began the public educational effort. In the final days before the primary election organized opposition appeared, but the medical society stepped up its activities and the measure was approved by a comfortable margin of votes.

The Medical Examiner Bill, strongly supported by MSMS, was passed by the 1953 Legislature. It allows any county in Michigan to adopt the modern system, upon a vote of the people in the county. The proposal may be placed on the ballot either by action of the Board of Supervisors or by petition.

County medical societies interested in seeing their communities take advantage of the benefits and protection of the Medical Examiner System can accept the "case history" in St. Joseph County as proof that it can be done. Meanwhile, as is the case in any worthy PR project, MSMS will stand ready to help on request.

THE BEAUMONT MEMORIAL DEDICATION is now history. A quick recapitulation indicates that no single project of MSMS—and probably of any other state medical society—has ever received such widespread public notice.

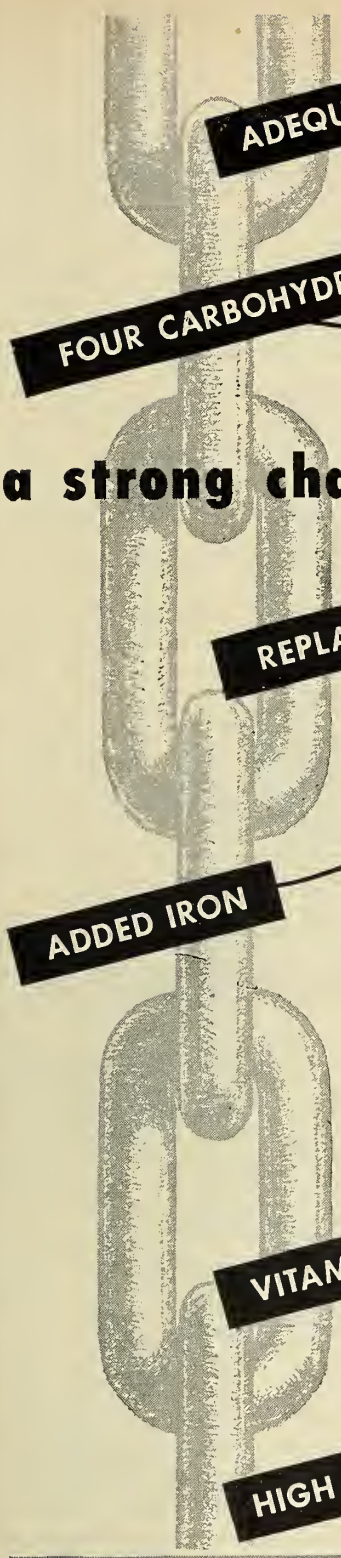
Newspaper and magazine lineage on the dedication was tremendous, with much more to come on the Beaumont Memorial itself in the future. "On-the-spot" coverage was undertaken by newspapers ranging from the *Mackinac Island Town Crier* to the *New York Times,* the latter carrying an eye-witness story by a top reporter which ran longer than some Michigan accounts. It is believed that every newspaper in Michigan—both daily and weekly—carried at least one story on the Beaumont Memorial Dedication, and most of the dailies carried several, plus editorial comment.

SPECIAL FEATURE STORIES were sent out in advance of the dedication by the Associated Press, NEA syndicate, and other news services, reaching almost every daily newspaper in the United States and Canada. The two largest French language newspapers in North America, published in Montreal (and which rival in circulation many of the well-known newspapers of France), devoted several columns in Sunday editions to the Dr. Beaumont-St. Martin story and the new Memorial. The MSMS PR Department supplied on request special materials and photos to a great many publications outside of Michigan, including *The Toledo Blade, Milwaukee Journal, Cleveland Press, Journal of the AMA, New England Journal of Medicine, Canadian Doctor* and *Military Surgeon.*

Two radio stations made recordings of the ceremonies and re-broadcast the principal addresses; in addition to on-the-scene interviews.

In spite of the remote Mackinac Island setting, television coverage of the dedication was at a maximum, thanks to the co-operation and interest of the University of Michigan. Every TV station in Michigan carried one or more of the five news films dealing with the Beaumont Memorial dedication produced by the University, with MSMS co-operation. These included: (1) Three-minute kinescoped interview with Emil Lorch, Beaumont Memorial architect, the week before the dedication (seven TV stations); (2) two advance news films shot on Mackinac Island and rushed to the mainland (seven stations); (3) special news films of the actual ceremonies (six stations); (4) 15-minute "Michigan Report" film

(Continued on Page 1061)



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Editorial Opinion

THE BEAUMONT MEMORIAL

Michigan doctors can be proud of a recent memorial which they have established to a famous army surgeon. They contributed over $50,000 to establish this memorial to William Beaumont, the Army doctor who rendered great and lasting service to medicine. On July 17, the William Beaumont Memorial was dedicated at Mackinac Island, Michigan. The building so dedicated is an authentic reconstruction of the American Fur Company store; it is built on the actual foundation of that store. In that original building, located adjacent to Fort Michilimackinac, Alexis St. Martin, an eighteen-year-old French Canadian, was gravely wounded by accidental shooting. That was on June 6, 1822. Nearby at the fort was Doctor William Beaumont who answered the call for help. In that day before general anesthetics, antiseptic, and aseptic surgery, the doctor decided to operate on his patient. A life was saved; however, a permanent opening into the abdomen resulted. The wise surgeon answered the knock of opportunity at his door. This permanent opening into the stomach gave Beaumont a chance to study the gastric juice. Beaumont had never gone to medical school, although he had worked under a perceptor in medicine which was not uncommon practice in those days. Now he faced the need for laboratory tests, so with his crude laboratory equipment he went to work. For years, he followed an unpredictable and elusive patient. This was at the doctor's expense and inconvenience, for Alexis St. Martin was not an easy one to handle. The work that this persistent doctor did was monumental; he contributed lasting knowledge to medicine.

We are all grateful to the Michigan doctors for establishing this memorial.—*The Military Surgeon,* August, 1954.

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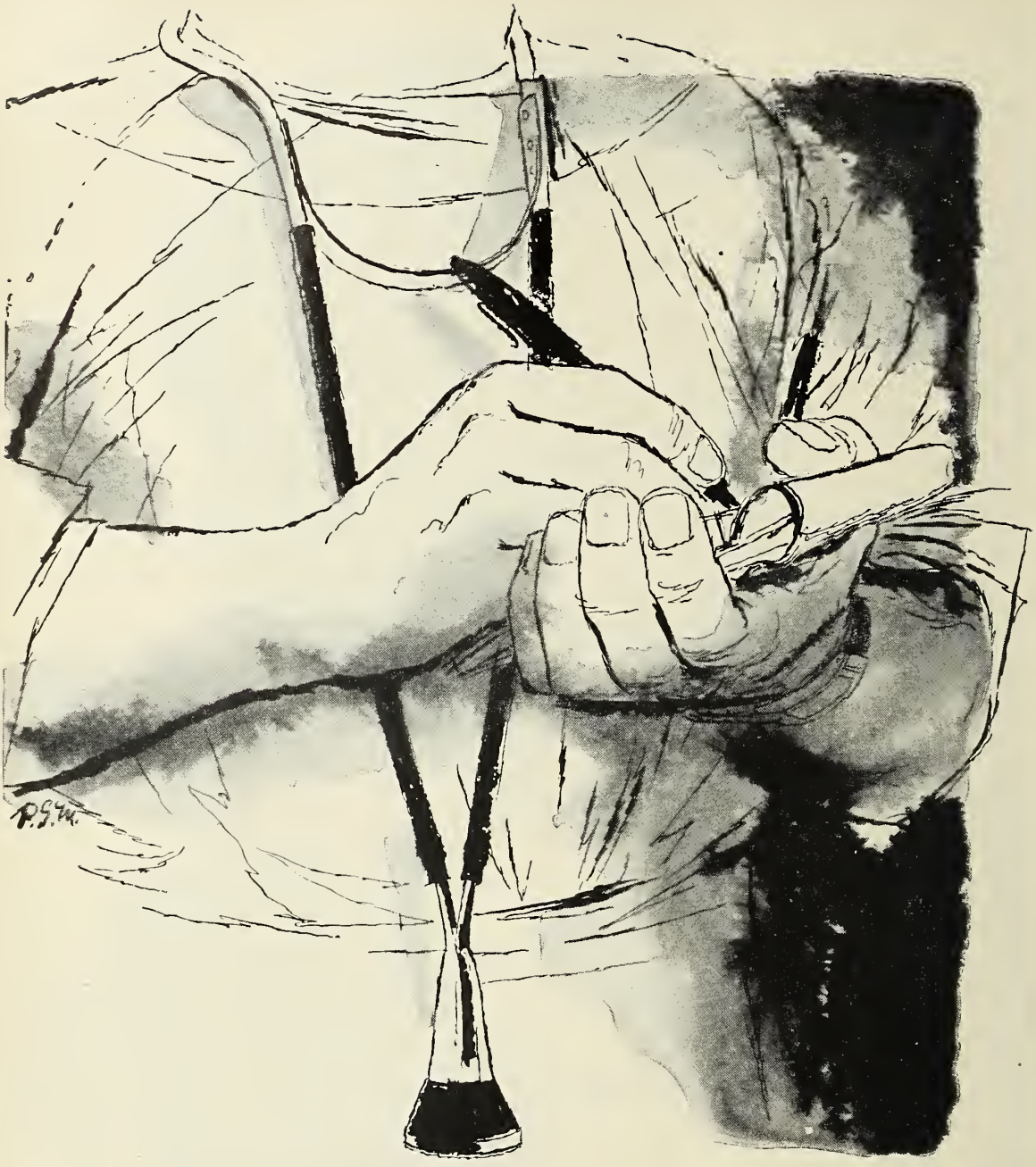
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The JOURNAL

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Respiratory Failure in the Newborn

By James L. Wilson, M.D.
Ann Arbor, Michigan

I HAVE been asked to be practical in this article. It would be easier for me to be so if I felt that there was a simple, clearcut program of treatment which was effective in asphyxia of the newborn. I do not have any such program that I can offer. Actually, there has been very little progress in practical means of resuscitation of the newborn in the last decade or so, even though we have learned a lot more about the reasons for respiratory failure.

Clearly enough, the causes of respiratory failure must lie in the brain, in the lung itself, or in the thoracic cage. In the brain there may be damage from oxygen lack, of (and let us not forget it) CO_2 excess, or glucose lack, and any of these may result from hemorrhage or edema. Treatment must of course be directed towards overcoming these lacks. In the lung there must be vigorous expansion to bring about normal gaseous exchange, but the faults in the lung itself in full term infants is restricted to obstruction of the bronchial tree from aspiration, amniotic fluid, or from serum transudate. The defects in the thoracic cage, except in weak premature babies or in those with paralysis, which are rare causes of respiratory failure at this age, must be secondary to inadequate action of the brain. Treatment, therefore, must be directed towards overcoming these disturbances in physiology—a defective brain function or fluid matter in the air passages.

Both atelectasis and this new mysterious, rather vague concept of hyaline membranes are secondary effects. Atelectasis is surely the result, not the cause, of respiratory failure and the "hyaline membrane disease," if there is such a disease, is in my opinion (although this is controversial) also a secondary effect brought about by dyspnea in the presence of an exudate in the air passages. This last is particularly common in premature infants, resulting, in my opinion, from some disturbance in the autonomic nervous system or in circulation which increases serum.

Now what can we do?

1. We can administer gases, oxygen obviously. This will help only if there is some respiratory action. Oxygen obviously does no good when there is no respiratory action. Even when there is some, but inadequate, respiration, the administration of high oxygen atmospheres can only supply oxygen but it does not improve the excretion of CO_2, and the deleterious effect of the CO_2 retention or of acid products of respiratory failure have been under-emphasized. It has been shown that excessive retention of CO_2 depresses rather than stimulates respiration.

2. We must clear the air passages as best we can.

3. Next, we can use artificial respiration, and this would be certainly the most logical and effective way to treat respiratory failure.

We shall discuss each of these in a little more detail. The administration of oxygen is simple and clear enough. A time honored custom, and I think honored by nothing but time, is the addition

of CO_2. It is sometimes true that in severe anoxia, actual CO_2 levels in infants may be low. However, since the respiratory stimulus is due, not only to CO_2 but to hydrogen ion concentration, and since this is very high in asphyxia, it seems illogical to administer CO_2. There is no clinical evidence that I have ever discovered that the use of CO_2 in addition to oxygen is in fact advantageous and I would just as soon use straight oxygen. Oxygen is administered in all kinds of ways, but many techniques are very inefficient. A very simple apparatus is the most effective way for a newborn baby; a little tent of folded cellophane around the head makes a relatively air-tight compartment into which a flow of oxygen of 2 or 3 liters a minute can give a very high concentration of oxygen without allowing CO_2 to collect. A more elaborate apparatus is not more effective. Oxygen administered by a funnel is useless when held an inch or more from the baby's nose as the expiration just blows away any small accumulation of oxygen before inspiration occurs, but this equipment is seen still in many hospitals and is used quite contentedly.

The second problem is that of clearing the infant's air tract. Simple drainage is obviously useful with the addition of gentle suction of the upper respiratory tract. A point at issue is whether, or how often, the larynx should be catheterized and the trachea aspirated. It is clear that no baby is born without his air passages being filled with amniotic fluid. The first extrauterine breath must, of necessity, distribute this fluid throughout the lungs, so some degree of aspiration is inevitable. We can do a lot of harm by too vigorous attempts to aspirate the trachea, but if it can be done gently and not as a routine, it is valuable.

Effective artificial respiration would be most logical to use in asphyxia of the newborn. How can we accomplish it? So far, no completely satisfactory way has been invented and I must emphasize at the beginning that any technique of artificial respiration that is effective, that is powerful enough to expand an infant's lungs with their original atelectasis which resists expansion more than at any other time, is also likely to cause lung damage such as rupture of alveoli and hemorrhage. This is the price I think we have to pay for adequate artificial respiration. In fact, the baby may at times bring this damage about by his own respiratory efforts.

Apparatus for Artificial Respiration

Years ago, we tried a Drinker respirator for resuscitation of the newborn, and this seemed then most logical. It does not work, however. One of the reasons it does not work is that the machine has to run rhythmically and the baby will not fit himself to a rhythmical cycle. A completely apneic baby in a Drinker respirator sometimes can be submitted to effective pulmonary ventilation, but such circumstances are not common. Positive pressure, alternately applied over the mouth, with various types of respiratory apparatus such as used in anesthesia, is effective and logical. It carries with it, of course, the risk of alveolar rupture but with well regulated apparatus, some good may be accomplished. Again, we run into the circumstance, however, that somehow or other the air passages do not seem to be easily expanded and rather high degrees of pressure are necessary to overcome the stickiness of the coherent, wet, lungs in their original atelectatic state and it is quite easy to cause damage on the one hand by too great pressure, or ineffective efforts by too little. Mouth to mouth insufflation has been carried on for many years and simple apparatus can be devised that at least protects the baby from infection, and with various types of "traps" to prevent excessive pressure. A lot can be done in developing apparatus for this purpose, but rhythmically applied machines such as the Drinker Respirator in which a baby is left, abandoned as it were, to the treatment of this mechanical device has not yet been successfully carried out with any consistency. I hope someone will devise better respiratory mechanisms which can be applied by a physician as he sees fit with the rhythm controlled by his observations.

The use of other types of apparatus might be mentioned in passing. "Mistified" air, if that is a good term, has been quite popular lately. That is, air supersaturated and with water droplets, as a fog. I have found little clinical evidence that this is effective, and little in theory either that it should be effective, but it is something to do, and at the moment it has become highly popular in the treatment of so-called "membrane disease" which I do not think is an entity, as I have said.

A rocking bed has been devised for the newborn infant but from what we know of its effectiveness in poliomyelitis and of the degree of pressure

(Continued on Page 993)

Management of the Anemias of Infancy and Childhood

By Wolf W. Zuelzer, M.D.
Detroit, Michigan

THE MAINTENANCE of a "normal" concentration of hemoglobin and red corpuscles in the circulating blood reflects the dynamic equilibrium between the formation and release of erythrocytes from the bone marrow and their destruction or loss by physiologic processes. Anemia is a symptomatic state in which this equilibrium is disturbed either by inadequate production of hemoglobin-carrying cells or by exaggerated destruction or loss of such cells or by a combination of these factors.

The causes of such disturbances are numerous. The physician treating anemia on purely symptomatic or empirical grounds without taking into account causative factors and mechanisms will often achieve less than satisfactory results. A diagnosis which includes consideration of these aspects is prerequisite for adequate therapy. This does not mean that one needs to carry around in one's head or in one's pocket an elaborate classification of the anemias. It does mean that a basic understanding of pathogenesis is required which will enable the physician to think clearly about the nature of a given case, perform the tests which will allow him to place it in certain large categories and then apply treatment which often follows almost automatically once the correct diagnosis is made.

The anemias of infancy and childhood are not basically different from those of later life. What is different is the patient himself, the growing organism whose needs differ from those of the stable adult individual. Above all, the causes and the incidence of the various types of anemia are likely to differ in different age groups. Broadly speaking, and realizing that in actual cases combinations are not uncommon, it is useful to divide anemias into those of (a) underproduction and (b) excessive destruction or loss of red corpuscles and hemoglobin.

Underproduction

Anemia due to inadequate performance of the marrow organ may be of two types. The number of cells produced by the marrow may be inadequate, but the cells are of normal or nearly normal size and hemoglobin content. The essential process is the reductions of all divisions among erythrocyte precursors. This group of anemias may be referred to as the hypoplastic-aplastic group. Among its main causes in early life are infections, especially chronic infections, renal insufficiency and malignant disease. There is also a rare congenital hypoplastic anemia, a poorly understood condition possibly related to congenital anomalies and endocrine disturbances.

The diagnosis of this group of anemias is not always easy. Its essential feature is a negative one, namely a low reticulocyte count indicating the lack of regeneration in the face of increased demand. The erythrocytes are normochromic. The marrow usually shows erythroid hypoplasia. Characteristically the therapeutic trials with hematinics fail, and in fact all therapy is doomed to failure unless the underlying cause can be established and eradicated. In occasional instances of the congenital variety of hypoplastic anemia cortisone therapy is successful. If other causes can be eliminated, a trial with cortisone is justified in intractable hypoplastic anemia. The dosage should be fairly large initially (100-400 mg. depending on the size of the patient) and may be gradually decreased after initial success until the necessary maintenance dosage has been established. Apart from this condition the therapy of the hypoplastic types of anemia is that of the underlying disease and of course transfusion when indicated by a dangerously low hemoglobin level. Frequent transfusions are not desirable because of the likelihood of transfusion hemosiderosis and the danger of incompatibility.

The second and more common type of anemia due to inadequate marrow output is that of iron deficiency. Here the production of cells is not greatly affected, at least not at first and not in comparison with the reduction in hemoglobin in the individual erythrocytes. The causes of iron deficiency anemia in infants are still not clearly understood though dietary intake, low stores of iron in the body, the demands created by rapid growth are generally conceded to be important factors. It should not be forgotten that occasionally blood loss due to a surgical type of lesion in the intestinal tract is responsible. If so, it must of course be corrected.

Iron deficiency anemia is the commonest anemia

of infancy and particularly of prematurity. It rarely if ever appears before 3-4 months of age and has its greatest incidence between 9-15 months. It would seem to be almost entirely preventable by adequate intake of iron but as yet no method of prophylaxis comparable to antiscorbutic and antirachitic prophylaxis has found general acceptance.

The diagnosis of iron deficiency is simple and rests on the demonstration, by means of hemoglobin determination, red cell count and adequately prepared stained films, that the erythrocytes are hypochromic and microcytic. Once this fact is established, a favorable response to iron may be expected. Iron may be given in various forms. Ferrous sulfate is the most widely used type of oral iron. There is ample reason to think that phosphates in milk interfere with absorption of iron in the upper intestine though if enough is given, iron is effective even in this vehicle. Generally administration between meals or in a vehicle such as orange juice is desirable. The initial dosage should be low because of occasional undesirable reactions, but may be quickly increased to provide at least 50 mgs. of metallic iron. The response is gradual and the restoration of an adequate blood count may take 6 weeks or more, depending on the initial level. Iron should be continued for several months to provide additional storage iron after the immediate needs of the body for hemoglobin production have been satisfied. Rarely, if ever, is there any need for intravenous iron. The more expensive preparations, which contain such metals as molybdenum or cobalt, are as yet entirely lacking in proven superiority over simple iron salts. Copper seems to be essential and may be lacking in some human hypochromic anemia but rarely needs to be given as a separate medication since ordinary iron salts contain adequate amounts of copper as contaminants. Needless to say, the iron-deficient infant should be given a complete diet, and infections should be eradicated.

Transfusions may be required in iron deficiency anemia but probably far less often than actually administered. The chief indications for transfusions are: (1) a dangerously low level of hemoglobin, (2) complications such as serious infections or bleeding.

The only anemia superficially resembling iron deficiency is Mediterranean (Cooley's) anemia. This condition is due to an inherited gene which in double dose causes a severe anemia usually fatal before puberty, in single dose a mild anemia or only minor morphologic aberrations of the erythrocytes without clinical significance. Mediterranean anemia is characterized by a severely hypochromic type of erythrocyte, apparently due to some quantitative or qualitative failure in hemoglobin synthesis. The diagnosis is not as a rule difficult. Iron is without benefit if not contraindicated. In cases with marked splenomegaly and anemia a carefully planned splenectomy is often of temporary and symptomatic benefit. Otherwise at present judiciously spaced transfusions are all that can be offered those patients. The minor (trait) form usually requires no therapy of any kind.

The only other deficiency anemia of clinical importance is megaloblastic anemia of infancy, a condition usually due to transient folic acid deficiency, perhaps in rare instances to deficiency in extrinsic factor (vitamin B_{12}). The condition was common in certain parts of the country during the war years and paralleled somewhat the incidence of scurvy, evidently because the utilization of folic acid is impaired by lack of ascorbic acid. Megaloblastic anemia is now found chiefly in infants with prolonged diarrhea or other infections which appear to raise the body's requirements for folic acid. The diagnosis rests on marrow morphology but may be suspected in the presence of macrocytosis, leukopenia and thrombopenia in the peripheral blood. The therapy consists in administration of folic acid which may be given by mouth in dosages of 10 to 20 mgs. per day, or injected if the patient is vomiting. A single course of five to seven days is adequate. Transfusion may be needed in more severe cases and in the presence of complications.

Exaggerated Destruction of Erythrocytes

The exact mechanisms by which red corpuscles are eliminated are not well understood to this day but it is known that the life span of these cells is between 100 and 120 days. The survival of erythrocytes may be shortened to a variable degree either because the cells are intrinsically defective as in the various inherited hemolytic anemias, or because of environmental factors acting unfavorably on cells of originally normal structure as in the various acquired types of hemolytic anemia. A combination of both conditions may occur and

create serious diagnostic and therapeutic problems.

Unless complicating processes interfere with marrow function (aplastic crises) hemolytic anemias are characterized by elevation of the reticulocyte count indicating a compensatory increase in production of new red cells by the marrow. Urobilinogen excretion is increased and, given a sufficient rate of breakdown of hemoglobin, the serum bilirubin will be elevated. In fulminating hemolytic anemias with intravascular destruction of red cells, hemoglobinemia and hemoglobinuria may be found.

The diagnosis of the inherited erythrocyte defects is not as a rule difficult because of the characteristic shape anomalies of the red cells. In congenital hemolytic icterus (congenital spherocytosis) the erythrocytes are misshapen, more or less thick, spherical and therefore form rouleaux poorly and have an increased osmotic fragility. Usually other members of the family can be shown to have the same condition which appears to be inherited as a simple mendelian dominant. The degree of the disturbance is highly variable and many individuals reach old age without difficulties. The indications for therapy exist when a crisis has occurred, since such crises are apt to recur and each is potentially life-threatening. A degree of anemia sufficient to interfere with growth, cardiac function or general well being is likewise an indication. The treatment of choice is splenectomy which should be combined with a careful search for accessory spleens. When the diagnosis is correct, the operation is nearly always successful.

Sickle-cell anemia is a disease due to a double dose of the sickling gene and found almost exclusively in the Negro race. The single dose of this gene produces a harmless condition known as the sickling trait. Both homozygotes and heterozygotes exhibit sickling in wet drops of blood. Sickle-cell anemia is a severe condition jeopardizing life, and interfering with normal function and well being. Unfortunately no successful treatment has as yet been devised. Splenectomy in selected cases characterized by early onset of symptoms, marked splenomegaly and severe anemia with crises seems to offer some benefits but is not curative and is not indicated in the majority of patients. General hygiene, close supervision, transfusions in times of special stress, and symptomatic relief are all that can be offered at present.

The extracorpuscular hemolytic anemias constitute a large heterogeneous group of varied and often unknown etiology. One group has been greatly clarified in recent years with the introduction of the Coombs test, namely the immune body type of hemolytic anemias. In the pediatric age group the commonest condition of this type is Erythroblastosis Fetalis or hemolytic disease of the newborn. A full discussion of its management is beyond the scope of this review. The nature of the process is related to the passage of maternal antibodies active against a blood group factor in the fetal blood with resultant breakdown of erythrocytes in fetal and neonatal life It is generally agreed that exchange transfusion at an early stage with blood of a type identical to that of the mother is the best therapy. Special articles should be consulted with respect to the technique and the indications for exchange transfusion.

Acquired hemolytic anemias associated with auto- and iso-antibodies actively produced by the patient are being recognized with increasing frequency in young children. The etiology of these cases is usually obscure. A malignant process may underly such hemolytic anemias but is rarely demonstrable in children. The condition is recognized by anemia with marked regeneration, spherocytosis and increased osmotic fragility and, above all, a positive direct and sometimes indirect Coombs test. The treatment of these patients offers a great challenge to the physician. Transfusions are often poorly tolerated and sometimes the cross-matching is a problem in itself due to the non-specific antibody in the patient's own blood. The greatest care is indicated when it is necessary to transfuse such children. Also, the likelihood of repeated transfusion requires the best technique so that veins which may be needed at a crucial moment are not destroyed.

At present, cortisone therapy seems to be the treatment of choice. The hemolytic process can often be controlled and the dosage may then be reduced gradually and eventually discontinued. Some patients recover permanently. Others remain Coombs-positive for many months and will relapse when cortisone has been reduced below a certain level but are likely to respond again to larger doses. The problem then becomes the long-term

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How Can the Medical Profession Reduce the Accident Hazard to Childhood?

By Harry A. Towsley, M.D.
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EACH YEAR, in the United States, approximately 14,000 children between the ages of one through fourteen lose their lives from accidental causes. It has been stated that for every fatal accident there are between 90 and 150[5] severe injuries and for each fatal accident four others receive injuries which cause permanent crippling damage. In Michigan, about 600 children from birth to fifteen years of age lose their lives annually from accidental causes,[4] which means that approximately 60,000 are severely injured annually, and that nearly 2,400 receive some kind of permanent damage each year as a result of accidents.

It takes little imagination to picture the pain, the sorrow or the mental anguish encountered by both parents and the children involved in any accident. Even less demand is made upon the imagination to realize the seriousness of the economic problems incurred, not only to parents, but to the community and State as well.

In the past quarter of a century, medical science and the medical profession have, by the judicious use of immunization procedures and the early institution of specific therapy, been able to reduce the mortality, and greatly reduce the morbidity of nearly all the common contagious diseases to the point where these diseases are no longer a major cause of death in children. By so doing, those deaths resulting from accidental causes and the morbidity resulting from accidents have now become the major hazard to the lives of our children from the end of the neonatal period through the age of puberty.

It would be wishful thinking to say that all accidents in this age group could be prevented, but we as physicians could exert a very great influence in reducing the frequency with which accidents happen.

How could this be accomplished? It is doubtful whether anyone could provide all the answers because of the peculiar nature in which accidents happen. There are, however, a few general principles which could prove very effective:

1. *Parent Education.*—Fifty-five per cent of the children under five years of age who were killed by accidents in 1952 in Michigan,[4] died from accidents occurring in the home or its immediate surroundings. It is reasonable to believe that the majority of accidents don't "just happen"—they are more than likely the result of neglect and carelessness. As physicians, we are familiar with the growth habits, and the curiosities of babies and small children, giving us the knowledge to discuss with parents the particular hazards common to various age groups and the precautions they should take to protect their children. For example, such discussions with parents would point out the importance of keeping out of reach of the creeping baby and the climbing toddler poisons, insecticides, kerosene, lye containing compounds and other caustics, and in particular acquaint them with the dangers that can occur from drug poisoning, giving instructions that all medicines which are kept in the house should be securely beyond the child's reach. It is particularly important that all medicines be properly labeled, with those prescribed for the baby kept in a special location to assure against the likelihood of giving drugs prescribed for adults to the child. Drugs are one of the most common agents causing poisoning in children, particularly aspirin, barbiturates and antihistamines.[1] We need to point out the dangers of falls from beds, high chairs, stairways, and other high places, which result in head injuries, leading to the development of subdural hematoma and subarachnoid hemorrhages. The frequency with which foreign bodies such as pop corn, peanuts, and beads are aspirated would indicate a very serious need for instructions to parents about keeping such items away from the baby and the child up to five or six years of age. In our instructions, we need to point out the various danger spots in each room of the home, particularly the kitchen where hot grease and hot water can be pulled from the stove, and in the basement where washing machines and power tools are so frequently found which could cause injury to the small child. The hazards involved in leaving matches, firearms, sharp objects laying about in any room should be discussed with the parents.

It is of utmost importance, if we as physicians are going to help reduce the accident rate in children, to stress the importance of almost complete protection of the child through the first year or two of life. Then, as he begins to have reasoning ability, the very important role of education can be started to enable him to avoid the possibility of accidents.[3]

We shall need to teach many parents how to educate their children. The child will be very slow to learn of approaching danger if all he ever hears from the parent is a scream of "no," "no," "no," or "don't do that." Such a negative approach, when he faces danger, teaches him little. A more positive approach, with words explaining his impending danger, will soon take on meaning if properly applied—such as "burn" when he touches something hot, or "hurt" when he contacts something sharp. The development of a vocabulary of meaningful words is especially important to the growing child if he is going to learn to recognize danger and protect himself from it, through education.

2. *Public Education.*—Offering our services to talk before Mothers' Clubs, PTA groups, Farm Grange organizations, and other community organizations, to discuss the problem of accident prevention in children, point out how accidents occur and ways in which they could be prevented, would be most helpful. Members of the Michigan Branch of the American Academy of Pediatrics have made this service available to such organizations in Michigan. With the approval of the Council of the Michigan State Medical Society, members of the Academy would willingly discuss ways and means of accident prevention at the invitation of county or local medical groups.

Distribution of pamphlets to parents to acquaint them in more detail with the hazards which occur in their home, would be very helpful. Such pamphlets as those which are provided by the Metropolitan Life Insurance Company on accident prevention and particularly the one made available through the Detroit Society for the Prevention of Blindness[2] would be extremely valuable.

3. *Professional Investigation.*—It should by no means be inferred from the foregoing that all the answers to accident prevention can be given. For this reason, it is particularly important that each physician treating patients who have encountered an accident should obtain a very careful history and try to determine all the factors involved in producing the accident. Such investigation may well lead to the prevention of other accidents, particularly if such accidents are discussed before hospital staff meetings and local Medical Societies.

4. *Community Activities.*—By stimulating the development of local accident prevention studies with other interested citizens, organizations and committees, determining the adequacy of local laws or ordinances which deal with accident prevention measures, we can help safeguard the citizens of our community and determine the needs for better safety.

Summary

It is very reasonable to believe that active participation by the medical profession in parent education, public education, professional investigation and community activities would very greatly reduce the frequency with which accidents occur to the children of our community.

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Growth and Development of Children

By E. H. Watson, M.D.
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THE PROGENY of homo sapiens has a "growing up" period which is unique for its length. This period approaches two decades among the more highly civilized branches of the genus. Among primitive peoples, the time required to achieve self-sufficiency is, of course, much less, but in any case the young of this division of animals, which likes to think of itself as the "highest," require a comparatively long time to grow and develop. Each normal infant at birth has enormous potentialities for growth and development. Not all will be realized to the fullest. At the end of adolescence, he represents an enormous investment on the part of parents and society, and it is hoped that he has developed "stature and wisdom" to the point of being able to meet successfully the problems of adulthood.

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Many factors influence growth and development —some favorably, some unfavorably. Table I lists some of these and indicates their influence. *Heredity* is a major determinant of growth and development. Normally, it sets approximate body size and shape. Color of skin, hair and eyes are genetically determined as well as susceptibility to certain malignant diseases. We see a high correlation of height and weight among siblings even in the United States where the "melting pot" effect of mating persons of different national origins produces some unusual genetic combinations. It is common to see families in which the majority of members are tall (or short), erupt teeth early (or late), mature sexually early (or late), and so on. These familial tendencies for the most part are genetically determined. Juvenile diabetes mellitus is nearly always on a genetic basis, as are cystic fibrosis of pancreas, progressive muscular dystrophy, osteogenesis imperfecta, certain instances of dwarfism and feeblemindedness. Literally scores of additional variations from normal growth and development are due to heredity.

TABLE I. DETERMINANTS OF GROWTH AND DEVELOPMENT

Favorable	Unfavorable
Heredity—Absence of inheritable physical or mental abnormalities in both parental lines. Predominance of good to excellent mental and physical status of antecedents.	Heredity—Inheritable mental and physical defects common in family lines. Rh incompatibility. Epilepsy, feeblemindedness, fibrocystic disease, etc.
Prenatal—Healthy mother who is not anemic and who received optimum nutrition, and a proper balance of work, rest and mental tranquility.	Prenatal—Unfavorable mental and emotional reaction of mother. "Spotting" or threatened abortion. Anemia, infections, especially virus infections in first trimester.
Birth—Normal birth—neither too fast nor too slow. Freedom from too much sedation and unwise iatrogenic troubles—such as "hurry up" or "hold back" measures.	Birth injury—Too long or too short labor—asphyxia intracranial hemorrhage.
Nutrition—Adequate vitamin intake with vitamins D and C being provided as such, and continued until the adolescent growth spurt is finished. Adequate protein and calcium provision.	Nutritional deficiency—Protein or vitamin deficiency in mother, or in the child postnatally. Iron deficiency.
Endocrine—Normal function and balance of various endocrine glands.	Disease—Illness of mother during prenatal period, or of the child postnatally such as meningitis, encephalitis, poliomyelitis, chronic disease of lung, kidney and heart.
Family life—Responsible, conscientious parents, abundant love, security and stimulation. A positive feeling on the part of the child that he is wanted, loved and cherished. Normal contacts with siblings and peers.	Injury (other than birth injury) crippling trauma, by car, by near drowning or electric shock. Falls down unguarded stairs—dirt and gravel cave-ins, etc.
Character and moral training—a positive program initiated within the family, and fostered by the church, to emphasize truthfulness, honesty, responsibility and consideration.	Emotional trauma—Unstable family, loss of one or both parents. Insecurity, sibling rivalry.
Education—Access to a school system able to meet the child's special needs.	Inadequate schooling—Non-availability of adequate schools and teachers. Lack of special facilities for the exceptional child.

Intra-uterine environment of the developing embryo is perhaps more important than most realize. If, because of factors inherent in fertilized ovum or in the endometrium, the embryo is un-

able to effect proper implantation the burgeoning new life will be jeopardized before it is fairly started. In this connection, the theory of "over-ripe ovum" is of interest. This theory suggests that an ovum may be fertilized too late for best results; that some degenerative changes short of death have already set in but the ovum is still viable but no longer capable of producing an entirely normal new individual. Thus, it is thought some congenital anomalies may come about.[1]

Following endometritis, recent abortion, or dilatation and curettage the endometrium may not afford a suitable site for implantation of the fertilized ovum and serious interference with the developing embryo and fetus may follow. Endocrine disturbances may result in an endometrium poorly prepared for implantation or nourishment of the embryo and fetus. These unfavorable intra-uterine conditions are probably not less important than infections or poor nutrition as a cause of congenital anomalies. It would seem desirable to warn prospective mothers against conceiving too soon after a miscarriage or other interference with endocrine physiology lest the ensuing child be maldeveloped. To the pediatrician, it is also obvious that some of the heroic efforts to prevent miscarriages are not always wise. Many times each year, the writer sees a defective or feebleminded child whose mother gives the story of "spotting" during pregnancy and tells of the endocrine and other treatment needed to protect the pregnancy. It is not always possible to agree unreservedly with the parents' statement, "I guess we're pretty lucky to have a baby at all."

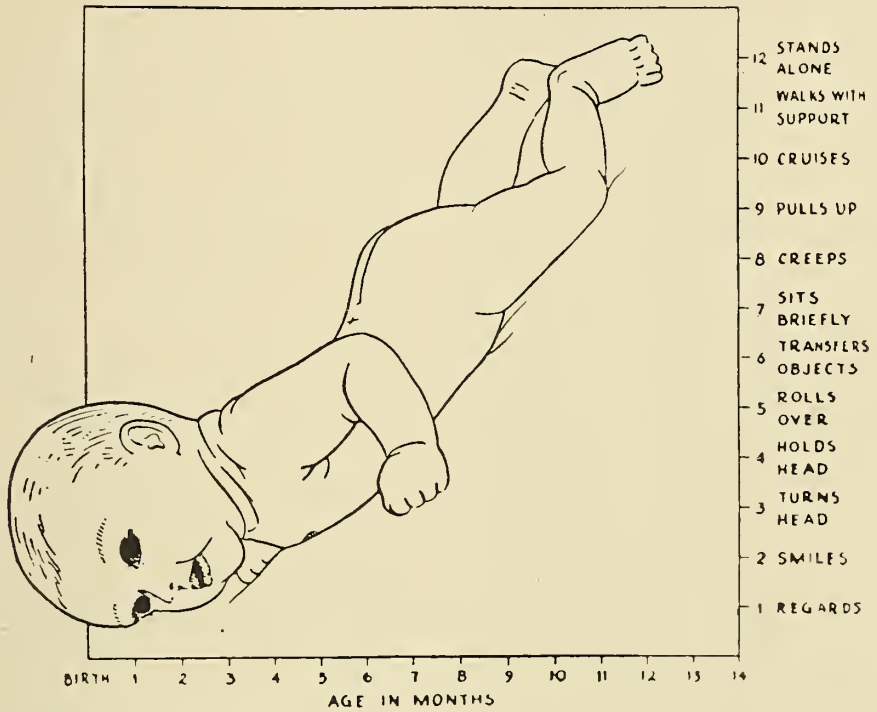


Fig. 1. *Cephalo-Caudal Law.* This diagram is based on C. A. Aldrich's developmental graph for the first year of life. It is meant to illustrate the cephalo-caudal law of neuromuscular control. All higher vertebrates acquires volitional control of muscle groups from the head to the tail ends of the body—hence the term cephalo-caudal. Thus, the child can move his eyes and smile a month or so before he can volitionally move his arms; the arm control precedes by two or three months the hip muscle control necessary for sitting up. Much later, the leg and feet muscles permit pulling up and finally the child walks. Even *in utero,* this definite advancement of the head end of the animal is seen.

Delivery and Neonatal Care

The medical profession should and does pay well-deserved tribute to the general practitioners and obstetricians who deliver our annual crop of four million babies. In doing so, they lose approximately one mother for every 2,000 living babies.

The reduction of maternal mortality over the past twenty years to nearly one-tenth its former rate is one of the almost unnoticed brilliant medical achievements. The babies of these mothers have not fared quite so well. Birth injury is still with us, although greatly reduced. There is one practice which still prevails in far too many hospitals, if history given by parents is to be believed. This is the practice of "holding back" the baby which is about to be born. The reason for "holding back" is nearly always the same. The physician is not present at the time of birth, and practices which can be deadly to the fetus, or at least to its future chances of normal mental development, are used to prevent its entry into the world until the physician arrives in the delivery room. Use of deep anesthesia, holding back on the head and holding the mother's legs together are all too frequent. A feebleminded or cerebral palsied child may result. Lesser degrees of anoxia at birth, brought about by delay in establishing respiration, may produce minimal cerebral damage, unrecognized until months or years have elapsed. Convulsive disorders and feeblemindedness or dull mentality could be explained in some children, if a good birth history were available. It is the writer's opinion that many hospitals do not have completely recorded accounts of delivery and immediate neonatal course. The elapsed time between delivery and spontaneous respiration with good pink color is important. Even more so are details of crying, feeding, Moro reflex and, particularly, any attacks of cyanosis, convulsive movements or refusal or inability to suck and swallow.

Nutrition

Very few children in the United States have growth and development interfered with to a clinically recognizable degree because of unavailability of food. Where growth failure is clearly the result of poor nutrition, the underlying cause, such as cystic fibrosis of the pancreas (fibrocystic disease—mucoviscidosis), renal disease, congenital heart disease, or celiac disease, is usually readily found. In two of these, absorption of nitrogen, iron, calcium and phosphorus are interfered with —in the patient with kidney inadequacy a state of chronic acidosis results in skeletal demineralization and other metabolic disturbances. In general, cow's milk fat is harder for the infant gastrointestinal tract to handle than are protein and carbohydrate. It has become usual practice for premature infants to be given formula feedings in which the fat is reduced to about one-half that present in whole milk. Some term infants also seem to do better, i.e., have less colic, less spitting-up and a generally smoother course when the fat is reduced in the formula. This may be the reason that certain proprietary formulae are so widely used and thought by some mothers to be superior to whole milk preparations. Recently, skimmed evaporated milk has become available so that the physician can now prescribe an evaporated milk formula with approximately half normal fat content, readily made by mixing evaporated milk and reconstituted skimmed evaporated milk, equal parts.

Vitamin B_{12} is the most reeent of the B Complex vitamins for which growth-stimulating properties have been demonstrated. It has been readily shown that bacteria and experimental animals fail to grow on diets lacking B_{12}. Its use in adults and children to treat primary anemias is also established. Wetzel[2] and associates have reported favorable responses to 10 micrograms of vitamin B_{12} given daily, orally, to school children who were growing very slowly. In a small group, he demonstrated increases of growth rate of 100 per cent or more over that expected (from previous performance) during the treatment period. His evidence for vitamin B_{12} deficiency in this group is not stated, but by keeping all factors constant except intake of vitamin B_{12}, he was convinced that not only was growth accelerated but the children also showed "increased physical vigor, alertness, better general behavior, and above all, a definite increase in appetite manifested by demands for second helpings."

Endocrine glands influence growth and development in many important ways. Definite syndromes associated with hyperfunction or hypofunction of the principal endocrine glands are recognized. In order that the various hormones—pituitary, thyroid adrenal, and gonadal—may exert their growth-stimulating or tissue-differentiating actions, the tissues acted upon—bone, brain, skin, et cetera —must be capable of full response. Thus, growth retardation may be brought about by deficiency of pituitary growth hormone, or by the inability of the skeletal system to respond to growth hormone. Chronic disease of lung, kidneys or heart may render the body unable to respond in normal fashion to normal production of hormones.

Dwarfism or giantism may result from under-

production or over-production of the growth hormone secreted by the acidophilic cells of the anterior pituitary. Androgens, which may be secreted in abnormal amounts or at abnormal (early) times by adrenal cortex or by the testicular interstitial cells can cause unusually rapid growth for a time, but do not cause giantism because androgens cause skeletal maturation and therefore stop growth after a time. True giantism can only result from over-production of pituitary growth hormone, which stimulates growth but not maturation. Practically all cases of true giantism (over 7 feet tall) result from tumor (adenoma) of the growth hormone-producing cells of anterior pituitary. It has been a matter of disappointment that the pituitary growth hormone has not proved a useful tool in stimulating statural growth in abnormally small children. Even though the hormone has been obtained in pure form, evidence is still lacking of its clinical value in correction of growth failure. Testosterone or methyltestosterone has been used to stimulate growth in slow-growing children. These are limited by the fact that they will cause maturation and closure of the epiphyses, if used in long tests for any considerable length of time.

The thyroid hormone has several actions affecting growth and development. It is an indirect growth hormone, a tissue-differentiating hormone, and a "stimulating" hormone of wide effect through its action in metabolism generally. It should be remembered that thyroid can exert a catabolic action if given in excessive dosage. A pretty safe rule to follow is that doses in excess of 2.5 or at most 3 grains of U.S.P. desiccated thyroid daily are dangerous and should not be given. Excessive dosage brings about negative balances of nitrogen and calcium.

Diseases other than those of the endocrine glands can influence growth. Acute illnesses of short duration usually have very transient effects on growth. The growing child has enormous recuperative powers and tends to "come back" rapidly once the acute illness is over. This is not true of illnesses which damage the central nervous system which because of its high degree of tissue specialization has very limited restorative ability. Thus we see permanent sequelae to meningitis, encephalitis, hemorrhage into the brain or its coverings, and anoxia. The after effects in any of the above may be obvious and definite such as convulsions or spasticity or feeblemindedness, or they may be much more subtle and so long delayed that it is difficult to be certain that they are etiologically related to the CNS involvement of years before. Undoubtedly some emotional dis-

TABLE II. PERCENTILES FOR WEIGHT AND HEIGHT OF AMERICAN CHILDREN*

Percentiles, Boys			Age Measurement	Percentiles, Girls		
10	50	90		10	50	90
			Birth			
6.3	7.5	9.1	Weight, lb.	6.2	7.4	8.6
18.9	19.9	21.0	Length, in.	18.8	19.8	20.4
			3 mo.			
11.1	12.6	14.5	Weight, lb.	10.7	12.4	14.0
22.8	23.8	24.7	Height, in.	22.4	23.4	24.3
			6 mo.			
14.8	16.7	19.2	Weight, lb.	14.1	16.0	18.6
25.2	26.1	27.3	Height, in.	24.6	25.7	26.7
			1 yr.			
19.6	22.2	25.4	Weight, lb.	18.4	21.5	24.8
28.5	29.6	30.7	Height, in.	27.8	29.2	30.3
			2 yr.			
24.7	27.7	31.9	Weight, lb.	23.5	27.1	31.7
33.1	34.4	35.9	Height, in.	32.3	34.1	35.8
			3 yr.			
28.7	32.2	36.8	Weight, lb.	27.6	31.8	37.4
36.3	37.9	39.6	Height, in.	35.6	37.7	39.8
			4 yr.			
32.1	36.4	41.4	Weight, lb.	31.2	36.2	43.5
39.1	40.7	42.7	Height, in.	38.4	40.6	43.1
			5 yr.			
35.5	40.5	46.7	Weight, lb.	35.8	40.5	49.2
40.8	42.8	45.2	Height, in.	40.5	42.9	45.4
			6 yr.			
40.9	48.3	56.4	Weight, lb.	39.6	46.5	54.2
43.8	46.3	48.6	Height, in.	43.5	45.6	48.1
			7 yr.			
45.8	54.1	64.4	Weight, lb.	44.5	52.2	61.2
46.0	48.9	51.4	Height, in.	46.0	48.1	50.7
			8 yr.			
51.2	60.1	73.0	Weight, lb.	48.6	58.1	69.9
48.5	51.2	54.0	Height, in.	48.1	50.4	53.0
			9 yr.			
56.3	66.0	81.0	Weight, lb.	52.6	63.8	79.1
50.5	53.3	56.1	Height, in.	50.0	52.3	55.3
			10 yr.			
61.1	71.9	89.9	Weight, lb.	57.1	70.3	89.7
52.3	55.2	58.1	Height, in.	51.8	54.6	57.5
			12 yr.			
72.0	84.4	109.6	Weight, lb.	69.5	87.6	111.5
56.1	58.9	62.2	Height, in.	56.1	59.6	63.2
			14 yr.			
87.2	107.6	136.9	Weight, lb.	91.0	108.4	133.3
59.9	64.0	67.9	Height, in.	60.2	62.8	65.7
			16 yr.			
111.0	129.7	157.3	Weight, lb.	100.9	117.0	141.1
64.1	67.8	70.7	Height, in.	61.5	63.9	66.5
			18 yr.			
120.0	139.0	169.0	Weight, lb.	103.5	119.9	144.5
65.5	68.7	71.8	Height, in.	61.5	64.0	66.7

*These figures are abbreviated and modified from data of H. C. Stuart, Department of Maternal Child Health, Harvard School of Public Health, and H. V. Meredith, Iowa Child Research Station.

It can be seen that with increasing age, the measurements lie farther apart for each of the given percentiles.

The height and weight of children of the same age vary considerably. Genetic, racial and other factors influence measurements. A workable table of height and weight values must recognize this variability among normal children. The percentile method of compiling reference tables or graphs is very useful. The above figures show the mean for height and weight at ages birth to eighteen years, and the 10th and 90th percentiles between which will be found 80 per cent of measurements of all children of a given age. The figures are those of H. C. Stuart and H. V. Meredith and are based on large groups of children from the United States, chiefly upper half of the country. Children whose measurements fall outside the 10th or 90th percentiles deserve most careful examination. (Reproduced from—Growth and Development of Children, by E. H. Watson and G. H. Lowrey, Year Book Publishers, 1951.)

orders, personality changes and school difficulties are on the basis of earlier brain damage. It is hoped that the disease which interferes with physical growth more frequently than any other—poliomyelitis—will soon be preventable by routine immunization procedures.

Emotional experiences certainly condition and influence mental and emotional growth and may even exert unfavorable influence on physical growth. A very considerable percentage of feeding problems and unbalanced diets have an emotional rather than economic basis. The angry or frightened child will not eat, and if forced to do so will often vomit. Intense excitement will diminish appetite or will cause food to remain undigested in the stomach for many hours, and probably be vomited later. Aside from these more immediate and tangible results of emotional disturbances the child's personality and social behavior is warped or blighted by the absence of love, security, and proper stimulation in his formative years. The writer sees many children each year whose parents complain of the child's non-conformity in home, in school or in neighborhood play. Some of these children are endogenous mental defectives. Some are certainly children whose originally normal growth potential has been blighted by disease or trauma. Still others were and are basically normal children but are suffering from unwise handling or unfavorable circumstances to the extent that their response is definitely an abnormal one.

Trauma or accidental injury is a very real deterrent to normal growth and development. This is particularly true if we include birth trauma, anoxia being the most important single instance. Each year several thousand children lose their lives from accidental causes and a much larger number suffer loss of some part of the body or injury to the point of impairing future growth and development. Physicians must lend their full support to educational campaigns aimed at protection of children against accidental injury.

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ANEMIAS OF INFANCY AND CHILDHOOD

(Continued from Page 973)

management of the patient maintained on high doses of cortisone. Infections are particularly likely to complicate the problem. Splenectomy is then fraught with danger and its effects are unpredictable at best. In acquired hemolytic anemia of immune type this operation, in children, at least, should probably be deferred as a last resort.

A variety of poisons and drugs are capable of producing hemolytic anemia. In children, mothballs (naphthalene poisoning) and lead are the commonest factors in this group. A careful history should always include information concerning possible ingestion of drugs or poisons. The treatment of toxic hemolytic anemias consists essentially in withdrawal of the noxious agents and in transfusion if indicated by the severity of the anemia.

A large group of poorly understood anemias remains in which the essential mechanism seems to be destruction of red corpuscles but in which neither intrinsic erythrocyte defects nor antibodies or poisonous agents can be demonstrated by present methods. Much further study is needed before all types of anemia are adequately understood. In the meantime those with obscure mechanisms must be treated symptomatically and by removal of associated or underlying disturbances. Careful analysis will enable the physician to arrive at the correct treatment in the majority of cases. By way of a simplification of the diagnostic problems, the following guide may be useful. The causes of anemia have a characteristic pattern in the various age groups. The anemic newborn most likely has hemolytic disease, far less often blood loss. The infant under four to six months most likely suffers from infection. The anemia of infants six to eighteen months is overwhelmingly likely to be of iron deficiency type. Significant degrees of anemia in children over three years of age frequently are of more ominous importance and should suggest at once the possibility of malignancy especially leukemia or one of the inherited anemias. As stated in the beginning, accurate diagnosis will usually lead almost automatically to the proper therapy.

Retrolental Fibroplasia

Retinopathy of Prematurity

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THIS PAPER intends to review concisely present knowledge of retrolental fibroplasia (RLF), and to offer a clear summary of the disease to those physicians who care for infants. It is based entirely on published reports, and deals only with essential facts. For those interested in the evidence, in controversial facts and details, many exhaustive writings are available in recent periodicals. The material in this summary is taken entirely from published sources, to which complete credit is hereby acknowledged.

Definition

RLF is a bilateral disease of the retina and vitreous, limited largely to premature infants of low birth weight. It is a definite clinical entity, showing an acute phase followed by a permanent, cicatricial phase, the degree of damage in the second phase depending on the severity of change in the first or acute phase. There is no associated impairment of the well-being of the child.

History

The condition was named and associated with prematurity by Theodore L. Terry in 1942. At first, it was recognized only in its late stages, and seemed to be a new disease confined to the United States. In 1949, Owens showed that the disease appears soon after birth with an acute process, and occurs more frequently than discovery of only the late stages would indicate. The condition has in recent years been recognized as appearing in most of the progressive countries of the world. With realization of the frequency and seriousness of the disease, much research has been done and is continuing, with the purpose of determining the cause and prevention of this condition. To that end, the chemistry, physiology and metabolism of the premature is being intensively studied. Much has been learned; much remains, before the desired answers are made certain, and well understood.

Clinical Signs

Since this is a disease of infants, there are no real symptoms. In later stages, the mother or nurse might note: (1) evidences of poor vision, (2) a gray reflex in the pupil, (3) an irregular pupil, (4) a small or unnatural looking eye, (5) blindisms by the child, such as pressing and rubbing the eye.

In the early stages, the eye externally may appear to be entirely normal. During the acute or active phase, an examination of the fundus of one or of both eyes may show the following, in the approximate order of their development:

(1) dilation and tortuosity of the retinal veins;
(2) dilation and tortuosity of the retinal arteries;
(3) vitreous haze,
(4) neovascularization of the retina, then into the vitreous,
(5) patchy and then generalized gray edema of the retina,
(6) transudates,
(7) hemorrhages in the retina or vitreous,
(8) retinal folds,
(9) retinal detachment,
(10) membrane formation.

Later, or in the cicatricial or inactive and permanent phase, the following ocular findings may be present, in various degrees of severity and in various combinations: (1) myopia of over 5 diopters (unusual in normal infants), (2) attenuation of the retinal vessels, (3) pale retina, (4) pigmentation of the retina, (5) pale disc, optic atrophy, (6) malformation of the optic disc, (7) elongation of the ciliary processes, (8) shallow or empty anterior chamber, (9) iris synechiae, with maybe a fixed pupil, (10) corneal opacities, (11) retinal folds, (12) detached retina, (13) gray masses or bands in the vitreous, (14) retrolental mass or membrane, partial or complete, (15) cataract, (16) glaucoma, (17) microphthalmos, (18) enophthalmos, (19) nystagmus, (20) photophobia, (21) strabismus, (22) pupillary membrane or remnant, (23) blue-gray, fetal iris, maybe atrophic, (24) late retinal hemorrhages, and even hyphemia.

Clinical Course

Progress, Regress, Late History.—Ophthalmological examination shows that the first evidences of the acute onset of the disease usually become

apparent during the second to the fourth week after birth, and are almost never discernable at birth. However, the onset may occur at any later time through the first three months. If the onset is after the first two weeks, it will probably not progress to the most severe degree. An onset during the first two weeks after birth gives a more serious prognosis. If the eyes are entirely normal at the end of three months, RLF will not develop. There may, however, be relapses or reactivation of the established disease, months after its apparent regression and quiescence. The usual course of acute development and regression to an inactive state covers four or five months within the first half year of life. The peak of activity and progress occurs usually in the third month, to be followed for weeks and months and occasionally years by changes of regression, cicatricial formation and contracture, and degeneration.

There is a marked tendency for RLF to regress, a reversal that may begin at any time or stage. Veins become less engorged, the arteries less tortuous, the vitreous clears, the retinal edema disappears. The regression may end leaving the eye with no or with variable degrees of permanent abnormality.

Local areas of retinal detachment present early in the course of the disease may disappear later, but usually these areas and retinal folds persist. A partial detachment may persist for five years and then suddenly become total. With time, membranes may thin and blood vessels narrow and disappear. As late as four years of age local hemorrhages may occur in retina, vitreous, or membrane.

Pathology

There is seldom any pathologic evidence of RLF at birth, but evidences can be found microscopically before they can be appreciated clinically.

1. In the equatorial region of the retina, endothelial cells proliferate in nests in the inner nerve fibre layer. There is associated a secondary increase in glial elements.

2. Endothelial cell nests canalize, extend, with edema of the adjacent nerve fiber layer, and break through the internal limiting membrane. There are hemorrhages from the new vessels.

3. The new-formed angiomatous tissue spreads along the retina and into the vitreous. There is organization, contracture, folding and edema of the involved retina, which becomes detached locally or extensively. The process is not primarily inflammatory.

4. From vascular and glial proliferation and retinal edema and folding, an unorganized, retrolental mass or membrane may form, incorporating retina, which remains attached to the ciliary body and optic disc.

5. The lens and iris are displaced forward, with anterior and posterior iris synechiae. Glaucoma, iris atrophy and microphthalmos may follow, sometimes with cataract.

Incidence

It is difficult to determine the true general incidence of RLF. It has now been reported in all areas of the U.S. and from most countries of Europe. The incidence varies greatly in different sections, in different institutions in the same region or city, and even in the same institution from year to year.

About 55 per cent of all prematures weighing 3 pounds or less at birth show some evidences of the acute phase of RLF. Of these, in 44 per cent, regression is complete so there are no residual changes; in 30 per cent, there are mild to medium severe permanent residual changes; and in 26 per cent, there is a partial or permanent membrane. These are the figures of Owens at Johns Hopkins. The incidence does not vary with sex or race, but is lower in high birth weight, and higher in infants of low birth weight. Since 1940, the rate of blindness in this country has been rising. Now, one-third of all new cases of blindness in persons under twenty-one years of age are due to RLF. All other causes of blindness are dropping in incidence. Of the new cases of blindness, 75 per cent are coming from the population under one year of age, or most new cases of blindness in this country are now caused by RLF.

In general, in prematures weighing under 3 pounds, around 25 per cent show permanent evidences of RLF.

Differential Diagnosis

Persistence and hyperplasia of the primary vitreous; pseudoglioma; toxoplasmosis; retinoblastoma; retinitis proliferans; septic endophthalmitis: tuberculosis; serous choroiditis; angiomatosis retinæ; coloboma of the optic nerve, et cetera.

Etiology

It is difficult to comprehend that such a widespread and devastating condition could appear in these times as a new and completely unknown disease. Pending controlled research, scores of guesses and theories were brought forward as possible etiologic factors. With varying degrees of thoroughness and of scientific control, these were at once studied, with the following conclusions, which are accepted today as facts, based on the best available evidence to this time.

RLF is primarily a disease of premature babies or babies of low birth weight. It may occasionally occur in full term babies. It is not hereditary nor familial nor related to race. Its origin is postnatal. Prematurity itself is a significant factor, and not the cause of the prematurity. No known maternal disease, of metabolic or infectious type, is known to be a causative factor. It is not related to vaccination during pregnancy, to the nausea of pregnancy, to the prenatal care and diet of the mother, to the type of labor, presentation or anesthesia at birth, to the placenta, or to the RH factor. In the child it is not related to the season of birth, to multiple births, to sex, or to congenital anomalies. It is not related directly, so far as known, to any specific condition or ailment of the child at birth. It is not related to the effect of light on the eyes of the premature, nor to feeding of the infant, nor to transfusions. It is not related to infection, though the possibility of a virus has not been thoroughly studied. It is not benefited by therapy with ACTH, cortisone or hormones.

Anoxia and Oxygen

For several years, attention has been focused with increasing interest on the effect of oxgen on the premature. RLF was more frequent often in the most modern nurseries, and escaped those reared at home. It appeared and increased in some foreign countries when modern incubators were first received and put to use. It was found in retrospect that babies who developed RLF had received more oxygen than those whose eyes remained normal. Some reports relative to the use of oxygen contradicted others. Sometimes increasing the oxygen flow to a child with acute RLF has seemed to aid the retinal disease, and removing the child from oxygen to induce a relapse. Thus two schools have developed: one believes the cause of RLF is anoxia, while the other claims that oxygen has a direct toxic effect and the cause is too much oxygen.

By now, controlled studies are being reported, determining in fairly large groups of prematures the relationship between high and low oxygen and the incidence of RLF. It is now quite well established that the use of oxygen, commonly done by means of an incubator, is probably the most important factor in the etiology of RLF. Whether the effect is simple and direct, or whether the result is an indirect and more complex interaction of various factors associated with prematurity is not yet known or established. Prematurity alone does not cause RLF. The disease seems to be directly related to an excessive administration of oxygen. The exact mechanism of the effect of oxygen in the causation of RLF is unknown yet, and whether the basic trouble is one of hypoxia or hyperoxia is disputed. Despite the important part played by oxygen, it must be stated at this time that the cause of RLF is as yet unproven, and is therefore still unknown.

Classification

In order to make more uniform reports on research in this field, a national joint committee has adopted a classification of the stages of degrees of RLF:

Active Phase

Grade I.—Dilation and tortuosity of the retinal vessels. There may be hemorrhages and early neovascularization.

Grade II.—Stage I plus neovascularization and some peripheral retinal clouding. Hemorrhages are usually present. The vitreous may be clouded.

Grade III.—Stage II plus peripheral retinal detachment.

Grade IV.—Retina is detached over a large area, or all round the periphery.

Grade V.—Complete retinal detachment.

Cicatricial Phase

Grade I.—Small mass of opaque tissue in the periphery. No visible detachment.

Grade II.—The mass is larger, with some localized retinal detachment. The disc is distorted by traction.

Grade III.—Larger mass with a retinal fold running from it to the disc.

Grade IV.—Retrolental tissue covers part of the pupil, with some retina still attached.

Grade V.—Complete retrolental tissue. No fundus reflex.

In the active phase, grades I and II may regress, grade III rarely. In the cicatricial phase, grade I and II, and sometimes III, have useful vision.

Examination and Diagnosis

Hold the infant on a flat-top table. Note the reaction of the eye and of the pupil to light. Dilate with 1 or 2 per cent homatropine and 2.5 per cent neosynephrine, each instilled once. Repeat these drops in five minutes. Make fundus examination forty-five to sixty minutes later. Give the infant its regular bottle, or a sugar-nipple to suck. Separate the lids with fingers or better with a special tiny speculum. It may require fifteen minutes to complete an adequate examination.

The appearance of the normal fundus in the infant and premature is quite different from that in adults. Misinterpretation of findings may result. The disc is more gray and pale. The macula may resemble degenerative changes. Lack of pigment in the periphery may suggest pathologic changes there.

Diagnosis is made by observing the signs listed above as clinical signs.

Management of the Premature Infant

The indiscriminate use of oxygen for prematures must be reassessed. Clinically, RLF is usually associated with the use of oxygen. Controlled tests have shown that the routine use of a high concentration of oxygen does not reduce mortality but does increase the incidence of RLF and of the more severe forms of that disease.

There may be other factors or agents in the production of RLF, but, in the present state of our knowledge, oxygen should be given to premature infants only when they are cyanotic, never in a concentration over 40 per cent, with frequent attempts to discontinue its use. The least possible amount of oxygen therapy should be given, because while such a restriction is not harmful to life and development, it will reduce to a minimum the occurrence of RLF.

Treatment

For the individual patient in whom RLF has developed, there is no specific treatment of proven benefit. In the acute phase, one school believes that placing the infant in high oxygen concentration (60 per cent) will give prompt regression in the retinal disease, later weaning the infant gradually back to normal oxygen concentration. This effect of increasing oxygen has not been uniformly confirmed or accepted. ACTH and hormones are of no benefit, as are irradiation and vitamins. Alternate instillation of miotics and mydriatics has been used in an effort to prevent iris synechiae. Surgery on the retrolental tissue mass has failed. Treatment of an individual case resolves itself then to symptomatic therapy, or essentially nothing.

Prognosis

When the severity of RLF in an involved eye reaches Grade III of either the acute or the cicatricial stage, the visual outlook is serious. In Grades IV the prognosis is grave and in Grade V it is hopeless for useful vision. During the first few weeks of the acute phase there is hope that regression will effect great improvement with a return toward normalcy. In the cicatricial stage there can hardly be any hope for actual improvement in vision, and in general it even may fail in time. Retinal detachment may destroy all vision months or years later.

The prognosis for prematures in the future is good, relative to their being affected with RLF. Reducing oxygen therapy to a minimum consistent with life has reduced greatly the incidence of the disease already. Research is now going on at many centers on studies concerned with feeding, infant care, physiology and metabolism of prematures, possible maternal factors, and the effect of oxygen. The last word on RLF is yet to be written, and the final answer may be more complex than simply to reduce oxygen therapy. But the outlook is good that we will soon have a fairly complete explanation of and solution for this amazingly new and disastrously widespread affliction of premature infants.

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Current Status of Research on Vaccination against Poliomyelitis

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WORK on the development of a vaccine against poliomyelitis entered its most hopeful phase during the past three years, when (1) it became possible to grow and recognize the presence of various types of virus in tissue cultures outside the body, and (2) it was demonstrated that there were only three main immunologically distinct types of viruses and that only one of these was responsible for almost all epidemics. There are two main approaches: (1) inoculate sufficiently large amounts of killed cultures of the three types of virus to stimulate the development of immunity, and (2) try to find or develop varieties of polio virus which, in very small doses, can infect and produce immunity without giving rise to paralysis or other symptoms of disease.

It has been demonstrated long ago that when sufficiently large amounts of killed polio virus are inoculated—amounts too large for practical purposes—it is possible to immunize animals against the experimental disease. The tissues in which poliomyelitis viruses can now be grown in the high concentrations required for killed virus vaccines are not available in unlimited amounts, since only monkey kidney has been found suitable for this purpose thus far. Whether or not enough vaccine can be made for all the millions of children and young adults who should be protected will depend on the dosage which will be required to produce and maintain antibody against the all important Type 1 virus in those who have no antibody at all to begin with. The use of adjuvants to enhance the effectiveness of smaller doses requires further study before it can be used in children, because of certain undesirable side reactions that have been observed. Although experimental killed virus vaccines have been tested in several hundred children, who already possessed antibody for one or another or all three types of polio virus, the significant tests on children without antibody against any of the three types of virus are still so limited that only further work will indicate whether or not killed virus vaccines in practically useful dosage can regularly be prepared on a large scale.

The final answer as to whether or not any poliomyelitis vaccine is really effective in preventing the natural paralytic disease can come only from carefully controlled experiments on hundreds of thousands of children. Since human experiments on so large a scale do not lend themselves to frequent repetition, it is necessary to have basic information on the potency, stability, and dosage requirements of different lots of vaccine that are manufactured on a large scale, so that one may know whether the material that is being subjected to test is only on the borderline or well within a certain margin of safety of the dosage required to produce a minimum antibody response that will last for at least one season of about 6 months. One also wants to know whether the small amounts of antibody produced by practicable doses of vaccines without adjuvants are effective only against the strains of virus incorporated in the vaccine or against other strains of the same immunologic type as well. These and many other important technical questions are only now in the process of investigation, and the answers will determine how fast progress can be made.

Extensive research on the second approach to vaccination against poliomyelitis, namely by living but avirulent (nonparalyzing) varieties of poliomyelitis virus, is desirable because experience with similar vaccines against smallpox and yellow fever indicates that a single inoculation may provide immunity for many years if not for life. Poliomyelitis viruses have been found to vary in their virulence and to mutate like bacteria or other living things. During the past year, it has proved possible to produce avirulent varieties of all three types of polio virus by special methods of cultivation and to segregate them from their virulent relatives. It was found that when single or very small numbers of virulent virus particles were used to seed cultures of monkey kidney, and when these were allowed to grow and develop for several days, the offspring were invariably highly virulent. However, when approximately 100,000 to 10 million virus particles were used to start off the cultures and transfers were made every twenty-four hours,

(Continued on Page 1016)

Summary of Michigan Foundation for Medical and Health Education Lecture, presented at Michigan Clinical Institute, Detroit, March 11, 1954.

Roentgen Diagnostic Aids in Acute Pediatric Emergencies

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IT IS not the purpose of this paper to present new or unreported facts; but rather to describe a few pathological situations in infants and children in which radiographic and fluoroscopic examinations will assist in arriving at a reasonably correct diagnosis and indicate the therapeutic program. To those physicians aware of these aids, this will be a review; to those unaware, it may serve to obviate an error in management.

Foreign Bodies in the Lower Respiratory Air Passages

Such a diagnosis must be entertained in all infants and young children with symptoms of respiratory distress, acute or chronic. Regardless of the clinical stage, we consider this as an acute pediatric emergency since it has been our unhappy experience to witness two sudden deaths in fine healthy two-year-olds before definitive surgery could be performed. Both deaths occurred in children where the foreign body was situated at the carina. Respiratory volume exchange was adequate, and we can only surmise that the sudden death was related to a vagovagal reflex or acute carinal edema. Fluoroscopy is the key to the diagnosis and often, because of the imperative need of prompt therapeusis, radiographs are limited to spot films made during fluoroscopy. In most hospitals, regardless of size, the machinery of accomplishment is often ponderous and, therefore, much time elapses between the home visit by the initial physician and the moment of bronchoscopic removal of the foreign body. It is our belief that each physician through whose hands a child passes is directly responsible for the welfare of that child, whether that physician be pediatrician, radiologist, intern, anesthetist, or bronchoscopist. It is also the duty of each physician personally to expedite the final care of the child.

From the viewpoint of x-ray diagnosis, any of three usual situations may exist. The most common occurrence is a ball-valve obstruction in the right lower or left lower main stem bronchus. In our experience, the sites of obstruction occur about equally on the two sides with occasional occlusion of the right middle lobe bronchus. Obstructive emphysema results (Fig. 1). The second most common situation is total occlusion of the bronchus with atelectasis distal to the obstruction. Localized edema of the occluded lobe or lobar segment may complicate the picture (Fig. 2). Location of the foreign body depends on the recognition of the difference between atelectasis and obstructive emphysema. Unusually, a long pliable foreign body such as bacon may hang up at the carina. In this case, it is imperative that the radiologist recognize that the apparently normal respiratory exchange noted during fluoroscopy does not denote the absence of a foreign body. In other instances, there may be foreign bodies in multiple bronchi on the same side or different sides. In one of our cases, multiple small pieces of raw carrot were present on the right with a large piece of carrot on the left. The small pieces caused intermittent obstruction, and the diagnosis of bilateral foreign body was made on the basis of the inconstancy of respiratory motions as observed during repeated fluoroscopy.

Spontaneous Tension Pneumothorax in the Newborn

The signs and symptoms are of increasing respiratory distress, usually quite evident in twenty-four hours. There may or may not have been a history of vigorous efforts by a physician to initiate respiration immediately after birth. Rapid labored breathing is noted with a progressive fullness of the affected hemithorax. Radiographs of the chest permit an immediate diagnosis (Fig. 3). In well-exposed radiographs, the pneumothorax is evident with obvious shift of the mediastinum away from the affected side. Aspiration of the air from the involved pleural space and re-expansion of the partially collapsed lung usually is the only therapy required. Wherever the leak occurs, subpleural or bronchial, elimination of the pneumothorax appears to permit spontaneous closure of the defect. Occasionally, aspiration may be necessary more than once. Radiographs of the chest are guides to the number and frequency of aspirations.

Inhalation of Very Volatile Substances

Particular reference is made here to the volatile hydrocarbons such as gasoline and kerosene, al-

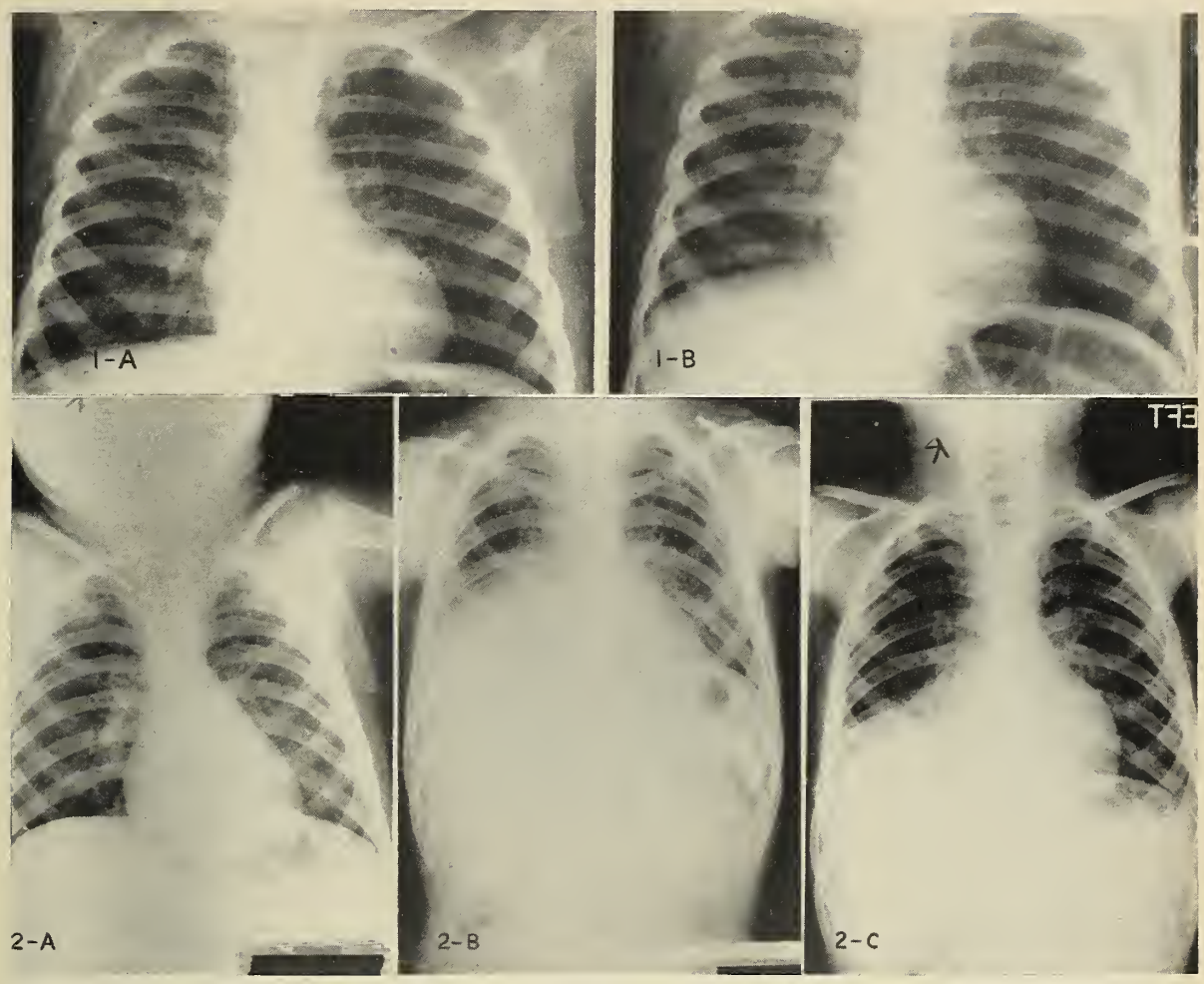


Fig. 1. Non-opaque foreign body in the left lower lobe. There is obstructive emphysema in the left lower lobe and mediastinal shifts during respiratory phases. Variations in pulmonary tissue translucency reproduce poorly. (a) Inspiration; (b) expiration.

Fig. 2. Foreign body aspirated January 23, 1952. (a) Radiographs and fluoroscopy negative and child symptomless at this time. Foreign body apparently causing occasional intermittent bronchial occlusion only. (b) By February 19, 1953, four weeks later, atelectasis with edema of the involved right pulmonary segment had occurred. Note that the combination of bronchial occlusion plus edema of the lobar segment obviates any mediastinal shift. (c) Radiograph, February 25, 1953, showed residual atelectasis without edema, therefore mediastinal shift. Bronchoscopy was performed on two occasions one week apart to remove two foreign bodies.

though the same applies to any other volatile or irritating liquid which is inhaled involuntarily. Usually, this occurs during voluntary ingestion of these liquids. The surprise of the unexpected unpleasant taste probably promotes gasping, choking and subsequent inhalation. The result is rapid pulmonary edema (Fig. 4). However, the highly volatile substance is eliminated rapidly from the lungs and, unless the inhaled load is very large and the pulmonary edema massive and generalized, the effects are quickly reversible without permanent sequellae. Gastric lavage is contraindicated, as it usually increases pulmonary complications.

Large Thymus Shadows

We have nothing new to add to the reported experiences of many authors. We conform to the school of thought which regards certain upper mediastinum shadows as produced by an unusually large thymus but attach no clinical significance to the shadow. We do not believe such shadows indicate a thymus as causative agent in laryngeal stridor or respiratory distress in infants. With such signs and symptoms, a search should be made elsewhere—in the intralaryngeal or extralaryngeal structures, in the trachea, or in the posterior naso-

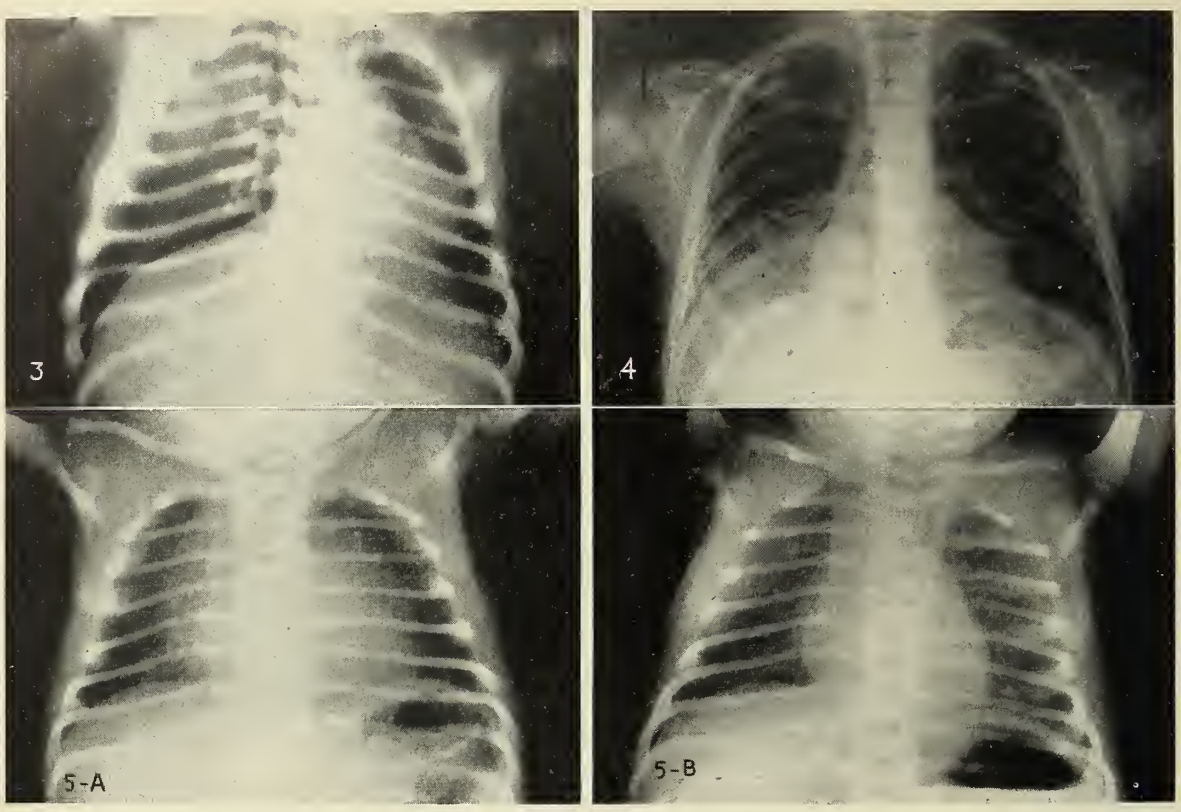


Fig. 3. Spontaneous tension pneumothorax in newborn: hyperexpansion of the right hemithorax, partial pneumothorax, and mediastinal shift away from the involved side. Usually simple aspiration of the involved pleural space permits the pulmonary rent to close quickly and spontaneously.

Fig. 4. Sixteen-months-old male child, several hours after drinking an unknown quantity of kerosene. Bilateral basalar pulmonary edema is present due to inhalation of kerosene. Twenty-four hours later, the lungs were clear and the child without symptoms.

Fig. 5. Probable enlarged thymus. Note triangular shadow to the right of the upper mediastinum. This child received 120 air r single dose. Three weeks later, abnormal shadow has disappeared. This change is real and not due to misinterpretation of radiographic technical errors.

pharynx. We emphasize that true thymus shadows are recognizable only in high quality radiographs and with the infant erect, in full inspiration, and in posterior-anterior and lateral projections. We do not believe that an unusually large thymus shadow warns of premature sudden death.

For these reasons, all of which are negative, we include large thymus shadows as a pediatric emergency. An error in prognosis is an error in management.

After this short definite stand, it is paradoxical to admit that rarely we administer x-ray treatment to infants with large thymus shadows. In a community long educated to the "dangers" of the enlarged thymus, quick change is not particularly welcome. It is interesting that in some infants we have treated the shadow has disappeared; in others it has not. Regardless of the effect on the shadow, in all infants in whom symptoms were not attributable to some extrathymic anatomical abnormality, presenting signs and symptoms disappeared (Fig. 5). One cannot conclude that x-ray therapy was the cause of this improvement.

Acute Disseminated Platelet Thrombosis

We have observed two cases of this uncommon tragic lesion. Reported here is an instance in a fourteen-year-old boy (Fig. 6). Symptoms and signs occurred two weeks after prophylactic antitetanus therapy. Cerebral involvement was prominent, and the initial presenting symptom was complete sudden inability to swallow. Fluoroscopic barium studies of the swallowing act were attempted early when hysteria was considered in the differential diagnosis. We noted that the barium outlined the hypopharynx adequately but did not enter the esophagus. Normally, when the hypopharynx is filled, some barium must involuntarily

enter the esophagus. Where there is organic paralysis of the muscles of swallowing, the hypopharynx remains filled but the esophagus empty. In hysteria, no barium enters the hypopharynx; or if it does, then some will be swallowed.

Congenital Lesions of the Alimentary Tract

Congenital alimentary tract obstruction in the newborn infant requires immediate surgical correction, and even then mortality is very high. The most frequent points of obstruction are: proximal esophagus with esophagotracheal fistula; gastric pylorus with hypertrophic stenosis; ileum with single or multiple areas of atresia; and rectum and anus with imperforation. This is not a list of all reported areas or causes of alimentary obstruction in the newborn but simply examples of the more common. With each obstructed organ (esophagus, stomach, small intestine, or colon), there are radiographic and fluoroscopic signs indicative of the organ obstructed.

With esophageal atresia and esophago-tracheal or esophagobronchial fistula immediate regurgitation of swallowed material is prominent (Fig. 7). The infant chokes, coughs, and has severe respiratory distress. Aspiration pneumonia occurs promptly, frequently in the right upper lobe first. Intestinal gas may or may not be present depending on the presence or absence of a more distal bronchoesophageal fistula. Radiographs and fluoroscopy performed with a catheter in the esophagus indicate the site of obstruction. A small amount of iodized oil may be placed through the catheter to define the fistula on the radiographs.

The signs and symptoms of hypertrophic pyloric stenosis are well known to all physicians and will not be enumerated here. It is interesting to emphasize, however, that the interval of time after birth at which symptoms and signs became most prominent varies considerably. We have observed the phenomenon of pyloric obstruction due to muscle hypertrophy in a premature infant three days old, and in full-term husky infants two months old.

Small bowel atresias present more difficult diagnostic problems, both clinically and radiographically. As in all mechanical small bowel obstructions the acuity and severity of symptoms are directly proportional to the proximity of the lesion to the stomach. Duodenal and upper jejunal atresias (Fig. 8) present signs and symptoms similar to pyloric obstruction except they usually manifest themselves earlier in the newborn period. In low small bowel obstructions (Fig. 9), abdominal distention is more prominent, the infant fails more slowly, and vomiting is a later sign. If the obstruction is allowed to persist for many hours, the small bowel distention often is severe, and it becomes extremely difficult in infants to differentiate this distended small bowel from distended large bowel on radiographs (Fig. 10). Retrograde studies of the colon with contrast medium may be necessary only when there is reasonable doubt as to the proper surgical approach. Other authors have pointed out that in situations where small bowel atresia is verified at surgery, the heretofore unused colon may appear obliterated, too. Confirmation or rejection of the suspicion can be established on the operating table by piercing the colon with a needle and attempting to fill it with normal saline solution.

Low rectal and anal atresias usually can be recognized clinically by determining the depth to which a catheter or probe may be inserted before meeting obstruction. Radiographs, however, may indicate the extent of the atresia, thereby helping the surgeon decide on an abdominal or perineal approach. Abdominal radiographic examination commonly is performed with the infant in the erect inverted position while an opaque instrument, such as a clinical thermometer, is inserted into the anus until the point of obstruction is met. If one can insert the instrument deeply, its progress may be stopped by the normal rectosigmoid curve and a false site of obstruction indicated. Since it is the level of obstruction and the space between gas-filled colon and inserted opaque instrument which designates surgical approach (Fig. 11), prolonged low ileal obstruction with hugely distended small bowel simulating colon and a false obstruction with the opaque instrument at the rectosigmoid curve may lead to a serious diagnostic error in location of the atresia.

Acquired Mechanical Obstruction of the Alimentary Tract

This is always a dramatic lesion, but in infants and children where personal history is unavailable or colored by fear, sharp diagnostic acumen is mandatory. Pediatricians and pediatric surgeons may obtain direct confirmation of suspected diagnosis by means of fluoroscopic and radiographic aids.

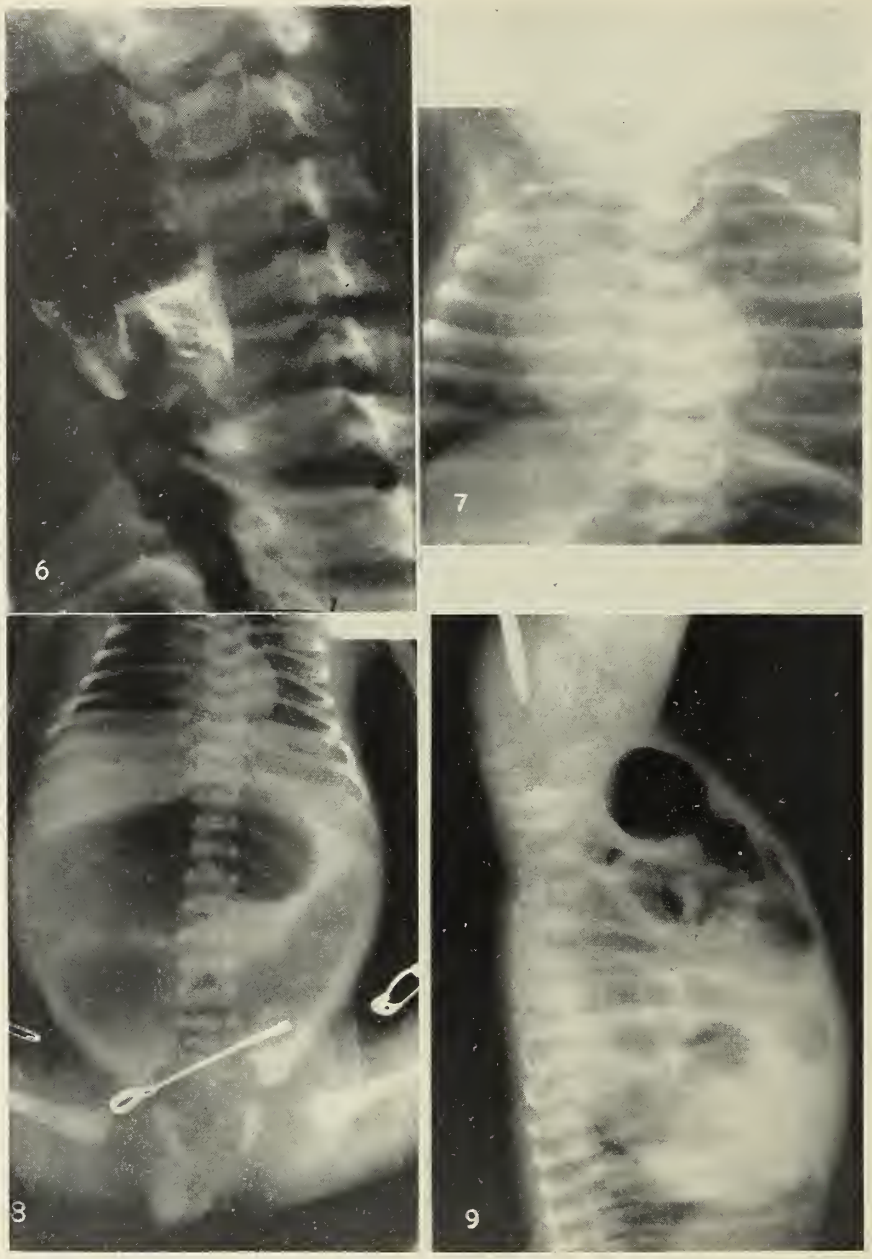


Fig. 6. Inability to swallow, central in origin, due to acute disseminated platelet thrombosis: lesion not diagnosed from this examination, of course, but this study indicates that the lesion is not hysteria, is not foreign body, and therefore is a true neurogenic lesion. Normally, barium which reaches the hypopharnyx begins to descend the esophagus except where there is paralysis.

Fig. 7. Esophageal atresia with high esophago-tracheal fistula. Opaque oil outlines high obstruction. Atelectatic pneumonia present in right upper lobe of lung with mediastinal shift. Gas is present in stomach, thereby indicating bronchoesophageal fistula must also be present at a lower level in the chest.

Fig. 8. Duodenal atresia at ligament of Treitz: stomach size normal. All small bowel gas seen is in a hugely dilated duodenum. Obstruction caused by intraluminal membranous band.

Fig. 9. Multiple areas of atresia in ileum with intestinal obstruction. Point of obstruction low and symptoms late (three days old) with much fluid in bowel proximal to the obstruction. Stomach and duodenum are not distended. Note how much dilated small bowel simulates large bowel in infants but the limited extent of involvement aids in diagnosis. Absence of gas filled bowel near thermometer tip argues against rectal atresia.

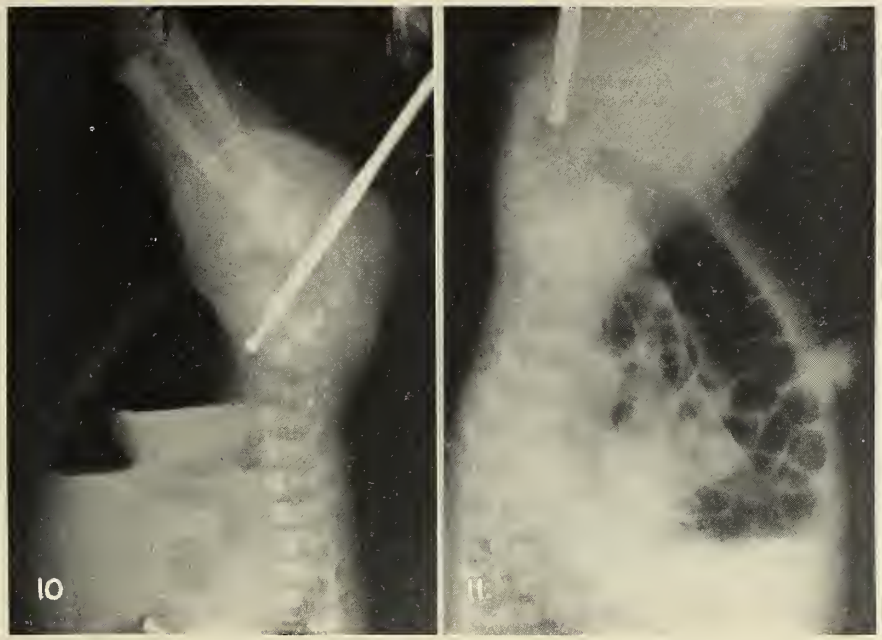


Fig. 10. Meconium ileus. This must be differentiated from bowel atresia by awareness of small bowel obstruction in mucoviscidosis. Small bowel gas is recognizable without large bowel gas. No meconium stools. Long depth of insertion of thermometer. Surgical recognition of collapsed but distensible colon which is not atresic.

Fig. 11. Imperforate anus. Note short space between thermometer tip and gas-filled colon. Note, also, that in low large bowel obstruction gas fills the entire small and large bowel.



Fig. 12. Barium demonstration of acute ileo-ileal intussusception; the intussuscipiens and intussusceptum are well outlined.

Fig. 13. Barium demonstration of acute ileo-colic intussusception; reduction by hydrostatic pressure of enema often is possible and is good practice in infants.

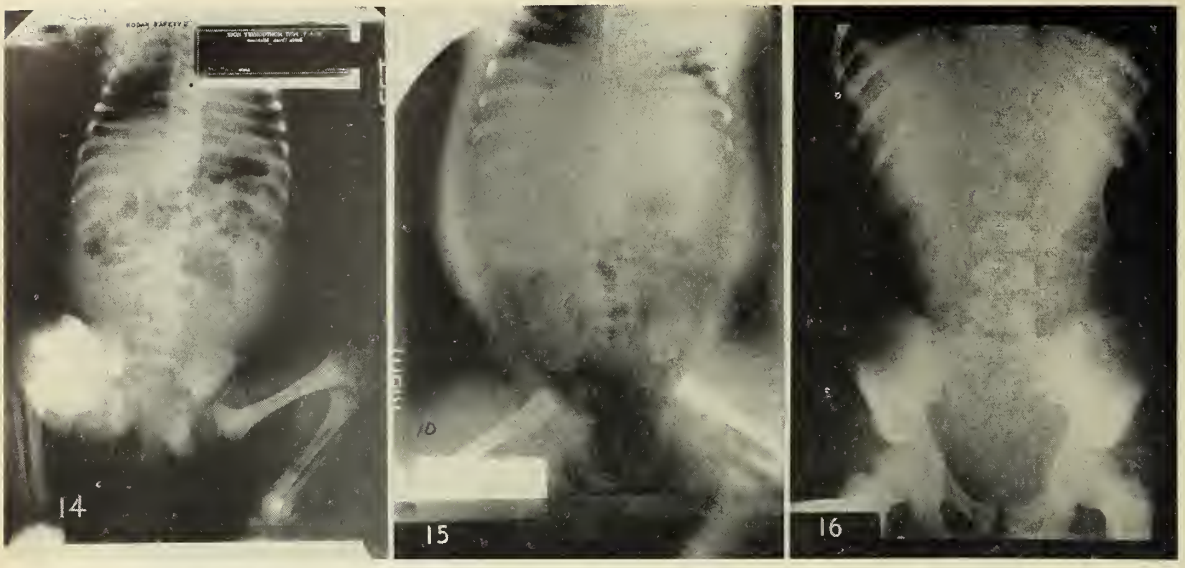


Fig. 14. Ruptured appendix with spreading peritonitis in two-weeks-old infant. Pronounced obliteration of properitoneal fat line, reflex ileus, and thickening of walls of small bowel loops. Stools normal. Child toxic.

Fig. 15. Anasarca and reflex ileus secondary to severe acute nephrosis: edema of the abdominal wall is very pronounced and all soft tissues distended. All normal soft tissue planes are obliterated.

Fig. 16. Ruptured splenic vein, gastric veins and duodenum: child run over by tractor four hours prior to x-ray study. Normal soft tissue shadows in the upper abdomen are completely obliterated by extensive intraperitoneal hemorrhage. Ruptured spleen suspected as more common lesion. Study made for free air did not indicate rupture of hollow viscus despite duodenal lesion, indicating rare but possible presence of hollow viscus rupture without demonstrable free intraperitoneal air. Properitoneal fat line preserved but not identifiable on reproduction. Lesion too recent for development of demonstrable ileus. Sixteen days later large walled off left upper quadrant abdominal abscess present with pleural effusion. Ileus present. Note loss of properitoneal fat line.

Of the acquired lesions in infants and young children, acute mechanical bowel obstruction due to intussusception is probably most frequent. The intussusception may be ileo-ileal (Fig. 12), ileocolic (Fig. 13), or colo-colic. The lesion may occur spontaneously without evident intrinsic bowel disease; or it may be precipitated by Meckel's diverticulum, polyps, or inflammatory disease of the bowel. Classically, intermittent abdominal cramps, bloody discharge from the bowel, and a palpable tumor mass in the abdomen are the cardinal signs. Obstipation may not be evident because fecal material may be expelled from the colon distal to the point of obstruction. Radiographs of the abdomen indicate varying degrees of small bowel distention proportional to the duration of time the obstruction has existed. If bowel necrosis occurs, peritonitis will follow and the early typical picture of mechanical obstruction is confused by bowel distention distal to the lesion as the result of reflex ileus. While the diagnosis may be suspected from clinical evaluation and the survey film of the abdomen, barium enema studies many times may outline the actual lesion. Several reports in the literature indicate that this procedure is entirely innocuous if performed with reasonable care. Furthermore, reduction of the intussuception may be effected by hydrostatic pressure, thereby obviating surgery.

Adynamic Ileus

Non-mechanical or adynamic intestinal obstruction in the newborn is unusual. It is not particularly unusual in older children. Figure 14 indicates a radiograph of a two-weeks-old premature infant who died of ruptured appendix and spreading peritonitis twelve hours after this examination. The radiograph is considerably different from that seen in mechanical obstruction, and although the exact lesions was not determined, spreading peritonitis is legible in the radiograph. Adynamic ileus with peritonitis usually can be differentiated from mechanical bowel obstruction.

Acute Toxic Nephrosis

Acute severe toxic nephrosis with anasarca and death is uncommon in infants. We report one such case (Fig. 15). At autopsy, microscopic sections of renal tissue showed changes simulating acute mercurial nephrosis.

The Traumatic Abdomen

The two most important results of abdominal trauma in any age are rupture of a hollow viscus with impending peritonitis; and laceration of a solid viscus with hemorrhage (Fig. 16). Aside from the effects of penetrating wounds of the abdomen, abdominal trauma in children much more frequently produces hemorrhage than it does gastro-intestinal tract rupture. Lacerations of the spleen and liver occur most frequently, although lacerations of the mesenteric vascular bed may occur at any level. Unfortunately, the sources of bleeding may be multiple; and the removal of a lacerated spleen may not produce cure when there is a torn vessel in some portion of the gastro-intestinal tract wall which produces intraluminal hemorrhage.

Free blood in the peritoneal cavity usually is recognizable on a survey radiograph of the abdomen. Free blood produces a general over-all haziness of normal soft tissue structures. The normal splenic shadow may be absent or enlarged, localized reflex ileus present, the stomach and colon displaced, and accompanying pleural reaction identified as indirect evidence.

Summary

A review has been presented of several emergencies which occur in the course of pediatric practice. Fluoroscopic and radiographic aids in the recognition and management of these emergencies have been emphasized.

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RESPIRATORY FAILURE IN THE NEWBORN

(Continued from Page 970)

necessary to overcome the original fetal atelectasis, it could hardly be expected that it would be effective.

A device using slowly alternating, positive pressure, has become very popular, and a rather expensive machine has had a widespread sale, but there is no evidence that the Bloxsom machine is in fact effective in expanding the lung, and the most critical students have come to the conclusion that it is simply an expensive way for giving oxygen.

In summary, I can only repeat that much more needs to be learned before one can be happy with any single procedure of artificial respiration in the newborn infant. It is still mysterious why the many efforts that have been attempted are so ineffective, and the physiologists have much yet to contribute before our knowledge can be reflected in practical and safe apparatus.

The Post-Caesarean Baby

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THE PREVALENT conception that Caesarean section should be performed in order to save the baby is grossly exaggerated. Facts and figures prove that the infant mortality rate following section is but slightly less than in delivery through the normal birth passage. Why, then, this erroneous idea? Granted that many a child has been born alive and has survived the neonatal period that would surely have deceased had Nature been allowed to take her course. Too many babies die at birth, however, as a result of improper prenatal care, injudicious management and inadequate resuscitative measures.

Caesarean section is performed before term for these three main reasons: placenta previa, abruptio placenta and the hypertensive toxemias that do not respond to conservative treatment. These three conditions usually make their appearance during the middle or the latter part of the third trimester of pregancy. Naturally, after conservative treatment has failed, section is resorted to and either a premature or an immature fetus is delivered. Other conditions that are commonly seen as indications for elective section are the Rh factor, the elderly primipara and the diabetic mother. Unless appropriate measures are immediately instituted a good share of these infants are lost. These requirements must include a skilled resuscitative team in the operating room at the time of surgery, which is supplied with adequate equipment for any emergency. A completely equipped premature nursery staffed by adequately trained personnel in constant attendance is also essential.

Cephalo-pelvic disproportion and abnormal presentation are also very commonly used indications for Caesarean. Needless to say, the majority of these cases require elective surgery. The borderline case, however, definitely should be allowed the advantage of an adequate "test of labor." If, after a valid trial, the head is not engaged or labor is not progressing satisfactorily, termination of the pregnancy should immediately ensue.

The elderly primipara is a much maligned individual. She is not allowed, in many instances, to prove her worth. It seems a travesty to presume that these middleagers cannot produce like their younger sisters. Many do it with far greater ease. I often feel that sections performed on these individuals are frequently done for pecuniary reasons only. Neoplasm, cardiac pathology, congenital abnormality (both maternal and fetal), fetal distress, previous Caesarean and many other justifiable and unjustifiable indications for section are responsible for our high operative incidence and excessively high fetal mortality rate.

I do not intend, at this time, to debate further the indications and contraindications of Caesarean section. My plea is for fetal salvage. Suffice it to say, and rightly so, that many sections are done to save a mother, wife and useful citizen from untimely disability or death. If only more consideration were paid to the unborn child, the fetal mortality rate would drop rapidly.

The choice of anesthesia is of utmost importance. Preoperative sedation should be limited to a mild sedative, such as seconal or tuinal, the evening before elective surgery. Opiate derivatives before surgery should not be employed. Atropine or scopolamine, in appropriate doses, should be given forty-five minutes to one hour before surgery to dry up the mother's secretions. A great deal of controversy has arisen as to the various merits of local, spinal, caudal or general anesthesia. The choice of the anesthetic employed should be left to the opinion of the trained anestheologist or, if such resource is not available, to the attending physician who must make his decision from the material at hand. Spinal anesthesia is ideal in the small hospital where adequate help is limited. There is little, if any, depressing effect on the fetus. Muscular tone of the uterus is undisturbed, and postpartum hemorrhage is negligible. Graduate nurses are capable of administering oxygen and stimulants, when needed, and following the patient's blood pressure.

Local anesthesia is ideal where outside assistance is unavailable. The patient need not be watched as closely as with other agents. The main disadvantages result from apprehension of the patient, prolongation of the operating time and the unavoidable discomfort of the patient when the baby

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is extracted. Local anesthesia, however, does teach us many good lessons in the gentle handling of tissues. Continuous caudal anesthesia is seldom used at the present time. Its results are not what they were once claimed to be.

After much experimentation, I have adopted the following routine and have found it most satisfactory. Elective sections receive tuinal gr. iii the evening before surgery. One hour before schedule, scopolamine gr. 1/150 is administered. Sodium pentothal 2.5 per cent is given intravenously after the patient is draped and ready for surgery. Within several minutes, the incision is made and the baby extracted. Unless complications arise, sufficient time has not elapsed between the introduction of the pentothal and the extraction of the baby to allow depression of the respiratory centers of the child. The majority of these babies, barring prematures, are delivered in good condition and require very little resuscitation.

In discussing the various causes of fetal death, I shall consider them in reverse order of frequency, as I wish to spend most of my time on the most prevalent causes. It will be impossible to discuss all etiological factors.

Intracranial hemorrhage occurs as a result of the rapid compression with subsequent rapid expansion of the unengaged head or following excessive or traumatizing manipulations in efforts to extract the head. Statistical reports show little variance in the incidence of cerebral damage between the classical and the low cervical section. Caution to make the uterine incision adequately large is essential, if we are to obviate this injury.

In third place in the mortality race stands infection of the newborn. Adequate prenatal care, astute judgment in the timing of surgery, acceptable surgical technique and preoperative and postoperative antibiotics are essential to reduce this needless mortality factor.

Malformation rates the second spot as a cause of fetal death and may be classed as unavoidable. These fatal abnormalities are usually of the gastrointestinal tract, although hydrocephalus, spina bifida, meningocele and many others are occasionally seen. No known prophylactic measures are available.

Abnormal pulmonary ventilation is our number one killer. This includes atelectasis, anoxia, and the hyaline membrane and is largely preventable. Poor ventilation is more commonly seen in the premature infant and in the post-Caesarean child than in the term and normally delivered baby, and thus extra precautions are essential. The cough reflexes of the premature infant are underdeveloped, and the infant is overly sensitive to analgesics and anesthetics. Therefore, these agents must be used with caution and restraint and a specially trained and equipped resuscitative team is essential, if the survival of the child is anticipated.

It is well known that the fetus *in utero* attempts respiratory movements, and thus it is entirely possible that, with these efforts, varying amounts of amniotic fluid and amniotic debris might be aspirated. The bronchi and the alveolar spaces are thus coated and occluded with this protein material, thereby preventing proper aeration of the lungs after birth. As the swallowing reflex is also being developed, quantities of this material may be ingested, and, after birth, may be regurgitated and aspirated. These possibilities are more likely to occur in premature and Caesarean births than in normal term cephalic delivery. Why this is so is not clear. It may be that lack of oxygen from disturbed placental function causes increased respiratory efforts on the part of the unborn babe. It has been mentioned that the high incidence of respiratory distress following Caesarean section may be due to the fact that the baby has not been conditioned by uterine contractions or passage through the birth canal. The child of a diabetic mother, for some unknown reason, is prone to develop the membrane.

The possible rôle of oxygen in the production of the hyaline membrane is interesting. Experimental work at the University of Colorado has shown that the membrane could be produced in guinea pigs by the administration of 90 per cent oxygen over a period of thirty-six hours. The lung changes begin with desquamation of some of the epithelial structures and pulmonary edema. High concentrations of oxygen are frequently used over prolonged periods of time in the treatment of premature infants.

The clinical picture is quite clear. The child at birth breathes spontaneously, although there may be an excessive amount of fluid in the upper respiratory passages no abnormalities are noted. The signs of respiratory difficulty make their appearance within a few hours after delivery. Respirations become irregular and shallow. The lower thoracic cage retracts, while the abdomen expands, or respirations are entirely thoracic.

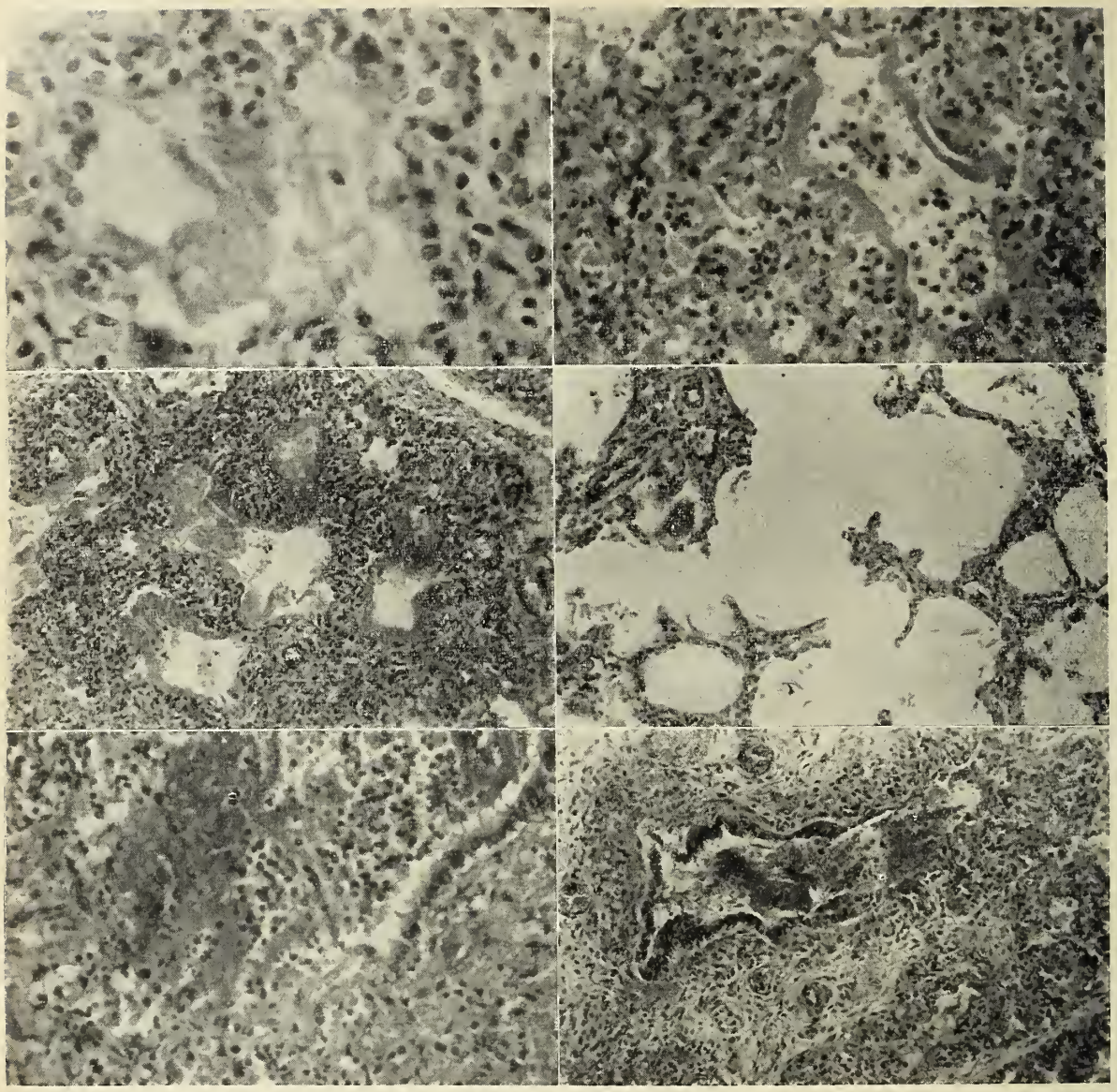


Fig. 1. Baby M., died seventy-two hours. Desquamated epithelium and the presence of the hyaline membrane in alveolus.

Fig. 2. Baby R. S., died forty-eight hours. Condensation of protein material covering alveolar walls.

Fig. 3. Baby M., died seventy-two hours. Protein precipitate in small alveoli.

Fig. 4. Baby G. K., died sixteen days. Hyperventilation with clubbing of alveoli due to rupture of the alveoli.

Fig. 5. Baby B. K., died thirty-two hours. Protein material in small bronchi.

Fig. 6. Baby M., died seventy-two hours. Protein material with terminal hemorrhage into alveoli.

There is usually cyanosis of some degree. Muscular twitching and convulsions may follow. If the child survives over three days, it usually recovers.

Postmortem examination shows an edematous and hyperemic lung. The alveoli are found to contain edematous fluid, amniotic fluid, vernix caseosa, cellular debris and, at times lanugo. Large areas of atelectasis are also seen. Capillary engorgement is present to some degree.

Prevention of the hyaline membrane should begin during the prenatal period. All feasible methods to bring the mother to term should be made. Active management of impending toxemia, the avoidance of strenuous activities which might

lead to accident physical damage and the proper control of the diabetic mother are of utmost importance. Whether early elective surgery should be performed because of the Rh factor is a debatable question. It appears that a tendency is growing against this procedure. Surgical results have too often proven disappointing. Certainly all precautionary efforts must be put into play to preserve the newborn. Sensitization studies are routinely carried out during the prenatal period, although findings are often misleading and meaningless. A cord blood Rh test should be made on all children of Rh mothers. Immediate competent pediatric care is essential and equipment available for exchange transfusion.

Proper choice and supervision of the analgesic and anesthetic is essential. The incidence of Caesarean section should be reduced. Compulsory consultation with a trained obstetrician, as is the practice in many hospitals throughout the country, will eliminate many unnecessary operations. As stated previously, there must, if these babies are to have a good chance of survival, be a thoroughly trained resuscitative team with proper equipment on hand for every section. The surgeon is too busy with the mother to pay too much attention to the child, and few of us are adept at resuscitative measures. Our tendency is to be too vigorous when gentleness and patience is all important.

The avoidance of chilling of the fetus is urgent. Recordings have proven that the baby's temperature will drop up to 2 degrees during the period of transference from the uterus to the heated incubator. If possible, the child should be wrapped in a warm sterile towel or blanket.

It is no more necessary to cut the cord immediately following extraction in sections than it is following normal births, provided the mother is in good condition. A short delay is often beneficial to the child. If placed below the level of the uterus, it will drain back most of the placental blood, which represents a large transfusion for such a small individual. During this period of waiting, the placenta is separating and control of maternal hemorrhage is being aided by the use of oxytoxics. Secretions from the upper respiratory tract are drained during and after this period of delay. Manual milking of the trachea and nose and the use of a rubber suction bulb in the nostrils and mouth are very advantageous in the clearing of the air passages. In the presence of excessive secretion, the insertion of a tracheal catheter will be of great aid in the removal of aspirated fluid. The use of the laryngoscope should be reserved for the person who is thoroughly skilled in its use. Laryngeal edema may follow improper use. Gastric intubation is a procedure which is not utilized often enough. Withdrawal of the stomach contents prevents further vomiting and pulmonary aspiration. This should be a routine procedure following each Caesarean or premature birth.

An incubator must be at hand. After an adequate "drying-out," the child is placed in the incubator in a Trendelenburg position and returned to the nursery. Continuous supersaturated oxygen is begun, but care is taken to keep the concentration below 70 per cent. Humidity is kept at a high level. Some machines are so equipped that they are able to produce a fine mist. Many pediatricians prefer the mist to plain humidity.

Mechanical respirators are of doubtful value, and those which offer positive pressure may even be dangerous. After the infant has once established respirations, the respirator may be of value in the maintenance of said respirations but it is useless otherwise.

Respiratory stimulants are widely used, but their efficacy is doubtful. Clearing of the respiratory tract of secretions and adequate warmth will do more in resuscitating an infant than repeated injection of stimulants. Needless to say, feedings must not be given during periods of respiratory difficulty.

All infants showing symptoms of the hyaline membrane and those subjected to tracheal aspiration should be given antibiotics for the first three or four days, as associated pulmonary infection is common. The hyaline membrane is often followed by pneumonia. The combination of penicillin and streptomycin is the preparation of choice. Vitamin B complex therapy is also advantageous to supplement necessary dietary deficiencies.

Summary and Conclusions

1. Premature and post-caesarean fetal mortality rates are too high.

2. There are many causes for this high death rate, but chief among them is abnormal pulmonary ventilation.

3. The majority of cases, especially those of the hyaline membrane, are preventable.

(Continued on Page 1000)

Management of Hearing Impairments

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THE MANAGEMENT of the patient with a hearing impairment proceeds in three orderly successive steps: diagnosis, therapy and rehabilitation.

The diagnostic study is the most important of these steps, for upon accurate and correct diagnosis depends the possibility of improvement by treatment. The history of the onset and course of the hearing loss is followed by inspection of the external auditory meatus and tympanic membrane. The eustachian tube orifice is inspected and its patency is tested. Finally, the function of the inner ear is determined by the caloric test of the vestibular portion, and the hearing tests of the cochlear portion.

The hearing tests are particularly important to the diagnostic study, for they will show whether the patient has a pure inner ear nerve loss, or a lesion of the sound conducting apparatus of the outer and middle ear. As a general rule, nerve losses are irreversible and cannot be improved by treatment, whereas most conductive losses can be improved or restored to normal by therapy. The tuning fork tests are still the otologist's most reliable means for differentiating a nerve from a conductive loss, but with improved audiometry we are coming to place more reliance upon the air and bone audiogram. In a pure perceptive loss, the air and bone conduction audiograms will be superimposed. In a pure conductive loss, there will be a loss by air but normal hearing by bone. The air-bone gap is an accurate measure of the amount of conductive loss, while the bone curve is an accurate measure of the nerve loss.

The diagnosis should be clear-cut and complete, including:

1. The *etiology* of the hearing loss. In conductive losses this can be determined without great difficulty. In nerve deafness this is not always so easy, for in about a third of the cases that we see, no apparent cause for the deterioration of the inner ear can be determined.

2. An accurate measure of the *degree* of loss.

3. The *prognosis*. Can this patient's hearing be improved by therapy, and exactly how much improvement can be expected? Does he have a stable loss or will it be progressive?

Roughly, half of the patients who come to us with a hearing impairment prove to have a nerve type of loss.

Some of the common causes for nerve deafness are worth mentioning, for while treatment cannot restore the loss, at least some of them are preventable.

1. A child may be born deaf. In some cases the highly differentiated cochlea failed to develop, and we term this "endogenous congenital deafness." In other cases the nerve loss was acquired *in utero* as a result of Rubella in the mother during the first three months of pregnancy, or of quinine or streptomycin given during pregnancy. We term this "exogenous congenital deafness."

2. Anoxemia during delivery can damage the hearing nerve. Infantile jaundice from the Rh factor can have the same result.

3. An acute febrile illness in early childhood can cause a toxic nerve deafness.

The diagnosis of deafness in young children is not easy. When the child fails to begin to talk, the parents notice that he also does not respond to sound and begin to suspect his hearing. However, brain damage and emotional disturbance can have similar effects. Consultation with a child psychologist may be necessary to reach a definite diagnosis. It is most important that the diagnosis of a severe hearing loss in a young child be made *as early as possible,* for if special training in speech and lip reading is begun at the age for acquiring speech, the child will learn to talk and lip read quite well. But if the special training is delayed too long, the child will express himself and communicate by signs and will never learn speech.

4. Cerebrospinal meningitis may invade the labyrinth with total deafness.

5. Mumps, ordinarily considered a harmless illness, may involve and destroy the cochlear nerve, fortunately on one side only in most cases.

6. Head trauma or fracture can cause concussion of the labyrinth with dizziness and nerve deafness.

Presented at the 88th Annual Session at Grand Rapids, September 24, 1953.

7. Quinine, salicylates, streptomycin, dihydrostreptomycin and some of the newer antibiotics are toxic to the eighth nerve. Dihydrostreptomycin is particularly dangerous since the hearing loss may not occur until several weeks or months after the drug is given. Penicillin is still the least toxic and the safest of the antibiotics.

8. Congenital syphilis causes an interstitial keratitis in childhood, followed after some years, by a rapidly progressive nerve deafness. Prompt recognition and treatment of the luetic etiology will save useful hearing.

9. Presbyacusis, the deterioration of the hearing nerve with age, is mentioned because all of us who pass the age of fifty will begin to show the loss of hearing for high tones if an audiogram is made. There is no treatment and no way of arresting or preventing presbyacusis. Vitamins, minerals, or other medicinal or injectable material are not of proven value for this or other kinds of nerve deafness.

10. Acoustic trauma accounts for about 10 per cent of patients with a nerve deafness. Prolonged exposure to noise above 90 decibels of intensity can injure the hearing nerve. Higher intensities are more injurious, and sudden bursts of noise produced by explosions, guns, punch presses, and other industrial processes, are particularly damaging to the hearing nerve.

Noise deafness *can* be prevented, as follows:

(a) In noisy factories, the noise level should be measured with a noise level meter. If the noise exceeds 90 decibels, a hazard exists.

(b) Reduction of noise to a safe level by improved design of machinery or working area is the ideal method, but not always attainable.

(c) Routine pre-employment audiograms of workers in traumatizing noise levels, followed by periodic retesting, will show up early beginning noise deafness so that the worker can be transferred or required to wear ear protectors.

11. One variety of nerve deafness that is worth mentioning because it is so common and because in the early stages it may be reversible, is labyrinthine hydrops or Ménière's disease. In this condition, there is an increased endolymphatic fluid pressure with a sense of pressure or fullness in the ear, attacks of vertigo, roaring tinnitus, distortion of music, and a hearing impairment that fluctuates markedly. Some cases of hydrops of the labyrinth are due to a specific allergy and clear up under allergic management. Most cases, however, are of unknown etiology. In the early stages limitation of salt and fluid intake and treatment with histamine or nicotinic acid may restore normal hearing. In advanced cases with uncontrollable disabling vertigo, surgical destruction of the labyrinth may be indicated.

12. Psychogenic nerve deafness, rare in civilians and common in military life, accounts for some of the miraculous cures for deafness that one hears about. There are special tests that will detect psychogenic deafness, and the best results will follow careful psychiatric study and therapy.

Except for the rare patient with an emotional deafness, and the early case of labyrinthine hydrops, treatment for nerve deafness is futile. Having made sure that the diagnosis is correct and that the patient has an irreversible nerve loss, the physician must then prescribe specific rehabilitative measures.

The first is lip reading, which will benefit every patient with a hearing loss. It is important to appreciate that even those of us with normal hearing, use our eyes to help out our ears. As the hearing becomes impaired, the eyes become more and more important in helping to understand conversation.

While some lip reading ability is picked up unconsciously, formal lessons will help to perfect the skill.

Electrical hearing aids are beneficial to nearly all cases of conduction deafness, and to some, but not all, persons with nerve deafness. The physician can tell from the hearing tests whether the patient will be easily fitted with a hearing aid. If so, the patient may choose his own aid as he would an automobile according to price, appearance, and availability of service. On the other hand, the hearing tests may show that the loss is of a type that is more difficult to fit to a hearing aid. These patients should be referred to a hearing clinic for an impartial "hearing aid evaluation."

Auditory education with the hearing aid is indicated for certain types of loss.

Speech correction instruction is indicated for patients with a profound deafness, to avoid acquiring or to correct bad speech habits.

About half the patients that come to us with impaired hearing have a conductive type of loss, and fortunately, the majority of these can be helped by therapy. For example, in one year

(1950), of 1,046 patients that consulted us for their hearing, 626 had a conductive type of loss.

There were ten cases of occlusion of the external auditory meatus, four by cerumen, six by congenital atresia, and all ten could be improved by removing the obstruction.

There were twenty-seven patients with a perforation of the tympanic membrane. We are now able to close many of these perforations, even those of many years' duration, with the restoration of good or normal hearing.

There were thirty-four cases of chronic draining ears. Clearing up the chronic infection improved the hearing in approximately a third of these.

Fifty patients had an adhesive middle ear deafness resulting from a previous otitis media. Some of these can be improved by surgical procedures to reconstruct a sound conducting system.

There were fifty two patients, mostly children, with blocked eustachian tubes. All of these could be helped by treatment. Some were due to hypertrophied adenoids and cleared up after a thorough adenoidectomy. A few had lymphoid nodules in the eustachian orifices that required irradiation. A considerable number had a chronic nasal allergy with edema of the tubes. The routine testing of the hearing of all school children is recommended chiefly to discover these cases of tubal occlusion, for if detected promptly and treated early, normal hearing can be restored. Many of these children have no idea that their hearing is defective—not knowing normal hearing, they expect nothing better. Too often their parents and teachers attribute their difficulties to disobedience, inattention or just plain stupidity. All school children should have their hearing tested, preferably once a year, but at least once every three years.

Of the 626 patients with a conductive loss seen in one year, 453 proved to have otosclerosis. Otosclerosis causes the majority of progressive deafness in early and middle adult life. The lesion of otosclerosis is a small nodule of new bone that slowly grows across the oval window until the passage of sound to the hearing nerve is completely blocked. Good hearing can be restored by constructing a new labyrinthine window to take the place of the occluded oval window. The fenestration operation, performed carefully on properly selected cases, results in a permanent restoration of practical hearing in 70 to 80 per cent of the cases. Since patients with otosclerosis can wear a hearing aid with excellent results, the fenestration operation is strictly an elective procedure and should not be advised for the infirm and aged or for patients with considerable cochlear nerve degeneration. On the other hand, patients who have worn hearing aids and have finally had a successful fenestration operation, find that their improved hearing, while not completely normal, is generally more satisfactory and certainly more pleasant and agreeable, than with the best hearing aid. In ideally suited cases, therefore, the fenestration operation is the rehabilitative procedure of choice, provided the patient is suitable for the operation and is willing to accept the approximately one out of five chance of a failure.

In conclusion, I should like to emphasize that in the management of hearing impairments, the most important step is accurate diagnosis. In our experience, inaccurate or incorrect diagnosis is responsible for much useless treatment as well as failure to achieve the optimum results from therapy.

THE POST-CAESAREAN BABY

(Continued from Page 997)

4. The presence of a trained resuscitative team, well equipped, should be present at the delivery of all prematures and at all Caesarean sections.

5. Competent pediatric and nursery care are essential for all premature infants and for those who show symptoms and signs of the hyaline membrane.

6. A reduction in the incidence of caesarean section will greatly lower the frequency of the hyaline membrane.

Acknowledgment

Although no direct quotations were made, a good deal of this material was obtained from the "Report of the Fifth M & R Pediatric Research Conference," 1953. Issued by M & R Laboratories, Columbus 16, Ohio.

My thanks also go to J. R. Schenken, M.D., and James Brown, M.D., Pathologists, Omaha, Nebraska, for their procuring the slides for the illustrations.

An Evaluation of the Grand Rapids Water Fluoridation Project

By John W. Knutson, D.D.S., Dr.P.H.
Washington, D. C.

FIRST, I should like to thank you for the privilege and opportunity of participating in your meeting. Second, through you, and particularly through the physicians of this city, I should like to express our deep appreciation to the people of Grand Rapids for the generous and understanding cooperation given throughout the controlled water fluoridation study which has been in operation here since January 25, 1945.

The whole world owes a debt of gratitude to a community such as Grand Rapids which was willing to be the first to take on the new in order that some of the old might be laid aside. It takes something of a venturesome courage, and faith of an extraordinary type, to do as the people of Grand Rapids did in 1944 when they approved the fluoridation study project proposed by the University of Michigan, the Michigan State Health Department, and the U. S. Public Health Service. For that faith, understanding, and co-operation, health workers and scientists will forever be obliged to you.

The Grand Rapids fluoridation project was started in 1945 with three major objectives. First, to determine the safety of the procedure; second, to determine its effectiveness as a mass method of reducing dental caries; and, third, to determine the practicability of the procedure. Among these objectives the one requiring most serious consideration under any circumstances was that of safety. It was the factor which received the closest scrutiny and assessment before the people of Grand Rapids were asked to undertake fluoridation on a study basis.

I am sure none of you would imagine that any one of the participants in the study, the University of Michigan, the Michigan State Health Department, or the U. S. Public Health Service would have proposed the project had there been any reasonable doubt about its safety from the standpoint of effects on the people of Grand Rapids. Our concern for safety then, was not that we had any doubt that a concentration of 1.0 p.p.m. of F. could be maintained in the water supply or that the people of Grand Rapids would suffer in any way. We knew that Grand Rapids had a very conscientious, highly competent director of its water works. But we didn't know how much of his conscientious attention and skill would be required to maintain the fluorine concentration at a level of 1.0 p.p.m. In other words, what were the technical difficulties in using mechanical feeders to regulate the fluorine concentration? If failures in equipment occurred, in what direction would they occur? How often and how elaborate would the fluoride tests have to be? Again, let no one think that any one of us would seriously consider exposing the population of a city of 165,000 people to a possible hazard of unknown risk.

The direct information available to us in 1944 on the dental and other physiological effects of fluoride-bearing drinking water on man was collected in areas where the water naturally contained appreciable amounts.[5,6] Here I should like to say parenthetically that the only difference between natural and controlled fluoridation from a chemical standpoint is that in the first instance the fluoride accrues to the water supply through leaching of fluoride-bearing rock traversed by the water and, in the latter case, from fluoride compounds added in controlled amounts by machinery. The form of the fluorine in the water in either case is that of the fluoride ion. Therefore it seems to me of particular importance to those who are concerned about the safety of fluoridation that nature provided an abundant laboratory in which to determine its effects on man.

Here in the United States, there are 62,000,000 people using drinking water containing 0.1 to 0.6 p.p.m. of fluorine. Another 3,000,000 use drinking water which naturally contains 0.7 to 1.5 p.p.m An additional million people are using drinking water with more than 1.5 p.p.m. Furthermore, I want to remind you that fluorine is a familiar substance in our dietary. Fish is relatively high in fluorine. Pablum, a widely used baby food, has or has had from 8.0 to 15.0 p.p.m. Tea leaves have a high concentration ranging from 30.0 to 60.0

Presented at the Annual Meeting of the Michigan State Medical Society, Grand Rapids, Michigan, September 25, 1953.

Dr. Knutson is Assistant Surgeon General, Chief Dental Officer, U. S. Public Health Service, Washington 25, D. C.

p.p.m. Liver, which is prescribed as one of our health giving foods in special conditions, contains fluorine. Thus, we are not dealing with a substance which is foreign to the dietary of the American people. It is a very common one.[4]

Basically, the proposal to control the fluoride content of the drinking water represents an unwillingness to continue to accept the helter-skelter amounts added by nature. In general, communities with less than 0.6 p.p.m. do not have enough and today 800 of these communities representing over 15 million people have instituted controlled fluoridation. On the other hand, the 3,000,000 people who have 0.7 to 1.5 p.p.m. in their drinking water have within the range of the optimum amount. Those having more than 1.5 p.p.m. should concern themselves with the problem of reducing the fluorine concentration to the optimum amount.

A relatively large number of people had for generations used naturally fluoridated drinking water, yet no scientific evidence indicated a hazard related to the use of such water where the fluorine concentration was below 1.5 p.p.m. Mottled enamel was the general sign associated with higher concentrations. This, of itself, appeared to be good presumptive evidence of the safety of 1.0 p.p.m. since several of the high-fluoride communities were in areas with university hospitals which were associated with teaching, research, and graduate medical activities such as autopsy examinations and the study of pathological specimens. A comprehensive physical examination including roentgenograms of the skeletal tissues and blood chemistry had been made of the continuous residents of Bartlett, Texas, whose drinking water contained 8.0 p.p.m. of fluorine.[3] The results of this study indicated that mottled enamel was the only consistent symptom of excessive fluoride ingestion. There were slight indications of increased bone density in a small percentage of cases but in none of these was there any sign of interference with function. The findings on mottled enamel were in accord with the thoroughly established observation that as the fluorine concentration in the drinking water increases above 1.5 p.p.m. the percentage of cases with mottled enamel and the severity of the mottling increases.

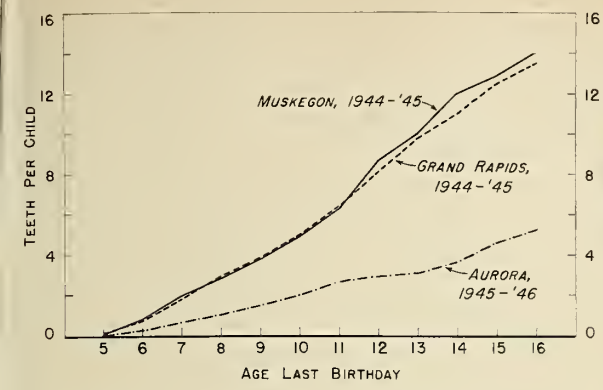
In addition, there have been extensive animal studies on the physiological effects of fluorine. The results of these have confirmed the observation on human subjects. The finding of major importance is that the first signs of excessive ingestion of fluorine through the drinking water route are found in the teeth. The most sensitive tissues to fluorides are calcified structures and the most sensitive of these is developing enamel.

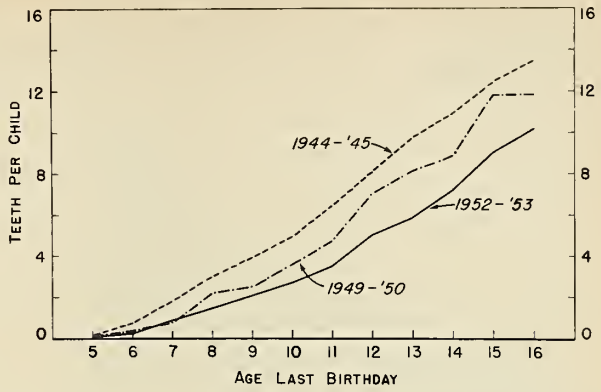
It is for this reason that a large part of the studies relating to the physiological effects of fluorides are concerned with their effect on calcified tissues. Nevertheless, the studies do include observations on the elimination of fluorides by the kidneys and the skin. They include studies on height and weight, and the incidence of bone fractures. Finally, they include detailed examinations of mortality data by cause of death and a comparison of these data for high-fluoride areas with similar data for areas having low or fluoride-free drinking water. None of these studies have presented evidence which would contraindicate controlled water fluoridation.

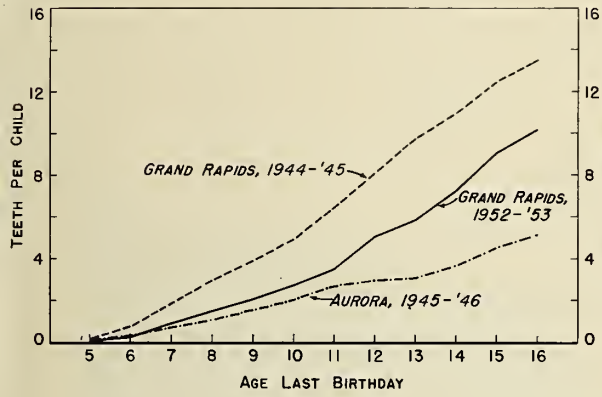
The basic plans for the Grand Rapids water fluoridation project provided for the collection of base line and periodic follow-up data on dental and related conditions. Provision was also made for collecting similar data in a control city, Muskegon, Michigan, whose source of drinking water was the same as that of Grand Rapids. In addition, comparable data would be collected in Aurora, Illinois, a community whose drinking water has an optimum natural fluoride concentration of 1.2 p.p.m. Dental caries experience would be recorded as the total number of teeth with evidence of being decayed, missing, or filled (DMF for permanent teeth and def for primary teeth).[1,2]

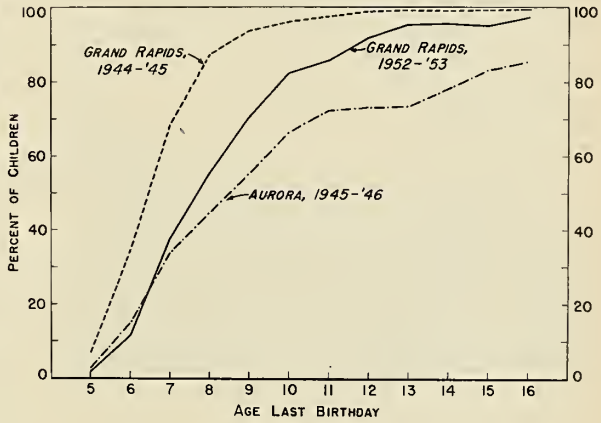
A comparison of the base line dental caries experience in permanent teeth of continuous residents of Grand Rapids (19,680 children), Muskegon (4,291 children), and Aurora (5,116 children) are shown in Figure 1, by age. Note that the average number of DMF permanent teeth per child for Grand Rapids and Muskegon children, by age, were quite similar in 1945. On the other hand, Aurora children consistently had approximately two-thirds less dental caries experience.

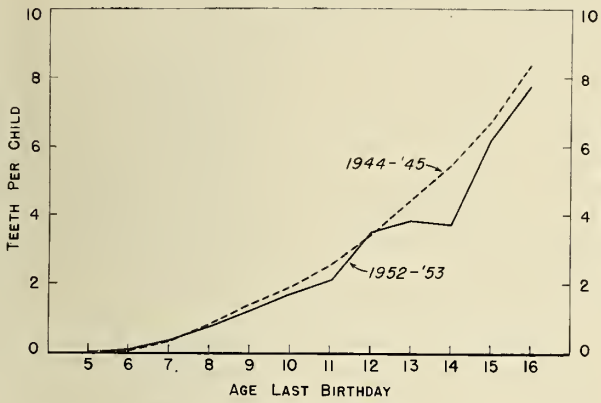
A study of these prevalence lines (Fig. 1) shows that the number of DMF teeth increases in a straight line fashion with increasing age so that Grand Rapids children aged 16 years have 13.5 DMF permanent teeth. Thus, it can be readily estimated that Grand Rapids children were accumulating 1.3 DMF permanent teeth per year











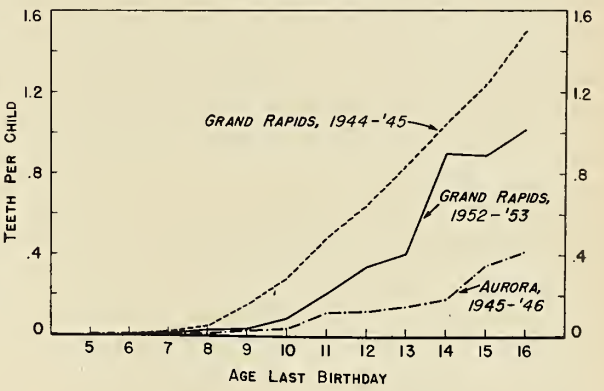


Fig. 1. DMF* permanent teeth per child for continuous residents, Grand Rapids, Muskegon and Aurora.

Fig. 2. DMF* permanent teeth per child for continuous residents in Grand Rapids.

Fig. 3. DMF* permanent teeth per child for continuous residents.

Fig. 4. Per cent of continuous resident children having one or more DMF* permanent teeth.

Fig. 5. Filled permanent teeth per child for continuous residents, Grand Rapids.

Fig. 6. Extracted permanent teeth per child for continuous residents.

in 1945 and Aurora children were accumulating 0.5 DMF teeth per year.

The next figure (Fig. 2) shows the relationship of the DMF prevalence lines to each other five and eight years after fluoridation was started. The downward trend in the caries experience line for Grand Rapids becomes more apparent as time after fluoridation increases. The trend is in the direction of an approach to the Aurora line which is being reached first in the younger age groups (Fig. 3). This observation is in accordance with

*Decayed, missing or filled.

the finding that in order to obtain the full dental caries inhibiting effects of fluoridated drinking water, children must use the water from birth when the teeth begin to calcify, onward.

Inasmuch as the results of the Grand Rapids study have been disseminated during the past three years and inasmuch as they are in full accord with the results of similar, independent studies conducted in other communities, such as Newburgh, New York; Brantford, Ontario; Sheboygan, Wisconsin; Marshall, Texas; Evanston, Illinois; and Lewiston, Idaho, there is now virtually unanimous agreement that the fluoridation of water supplies brings about a marked reduction in dental caries experience. The reduction in terms of average number of teeth attacked by caries is of the order of 60 to 65 per cent. However, this estimate is conservative since the number of surfaces affected per tooth and the degree of caries are also reduced.

It has frequently been said that the benefits of fluoridated water are limited to children below eight years of age, that is, to the period when enamel is being formed. However, this statement is not in accord with the results of an internal analysis of post-fluoridation dental caries experience. For example, Grand Rapids children who were eight years old at the time fluoridation started are now sixteen years old. Today's sixteen-year-olds have 25 per cent less DMF teeth per child than their counterparts had in 1945. Furthermore, as eight-year-olds in 1945 they had an average of 2.9 DMF teeth and eight years later they have 10.1 DMF permanent teeth. Therefore, the annual incidence rate is 0.9 DMF teeth, or more than 30 per cent less than the 1.3 rate observed in 1945. An extension of this type of internal analysis of the data leads to the conclusion that the benefits of water fluoridation are by no means limited to young children. Approximately one third of the benefits can be obtained after the enamel is calcified and after the teeth have erupted. Therefore, a continuation of the exposure of the teeth to fluoridated drinking water is essential to the maintenance of maximum benefits such as those observed in the comparison of findings for adults in the Boulder-Colorado Springs study.

As is to be expected, the reduction in caries experience observed in Grand Rapids children in terms of average number of DMF permanent teeth is accompanied by a marked increase in the proportion of children whose permanent teeth are caries-free. This comparison is shown in Figure 4. Note that more than three times as many children aged six years had one or more DMF teeth in 1945 as their counterparts have in 1953.

The findings on dental care expressed as filled permanent teeth indicate that the amount of dental care has remained remarkably stationary over the eight-year period of the study (Fig. 5). However, maintenance of the same level of care is bringing about the highly desirable goal of closing the wide gap between dental service needs and dental care. Manifestly, the ideal situation would be reached when needs and care are equal. Fluoridated drinking water is making the approach to this ideal a practical reality in Grand Rapids.

As you know, untreated dental caries is the major cause of tooth loss in children. Figure 6 shows the marked reduction in loss of permanent teeth by age, that has been accomplished in Grand Rapids during the past eight years. This reduction is directly traceable to the reduction in dental caries experience and is not due to an increase in the level of dental care.

The effects of fluoridated drinking water on the prevalence of dental caries in the primary or "baby" teeth of Grand Rapids children are shown in Figure 7. Note that the 1953 children aged four, five, and six years, have less than half as many def primary teeth as their counterparts had in 1945. Since exfoliation of primary teeth, both carious and sound, proceeds rapidly after age six, a full evaluation of the benefits of fluoridated water cannot be obtained by a direct comparison of prevalence data for children who are older. Nevertheless, the prevalence lines show the differences are appreciable.

Thus, the dental health benefits which have accrued to Grand Rapids children since 1945 and which are attributed to the fluoridated drinking water are quite apparent. Fluoridation has meant appreciably less dental caries, fewer toothaches, fewer dental abscesses and accompanying infection of dental origin, and a closure of the gap between dental service needs and care. An assessment of the corollary health and economic benefits is difficult, but the absurdity of the following statement is obvious, "Nothing will be lost by postponing fluoridation and everything is to be gained by learning more about the details of the physiological action of fluorides."

Studies on the non-dental physiological effects of fluoride ingestion are continuing. To date, the

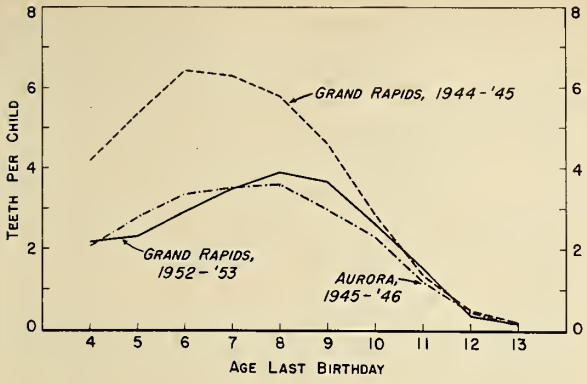


Fig. 7. DEF† Deciduous teeth per child for continuous residents.

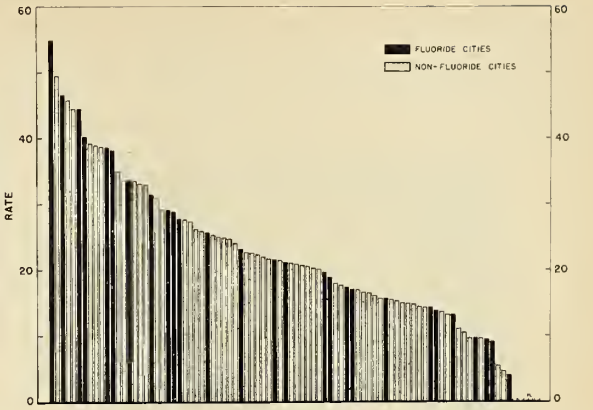


Fig. 8. Deaths* from nephritis in fluoride and non-fluoride cities, 1949-1950.

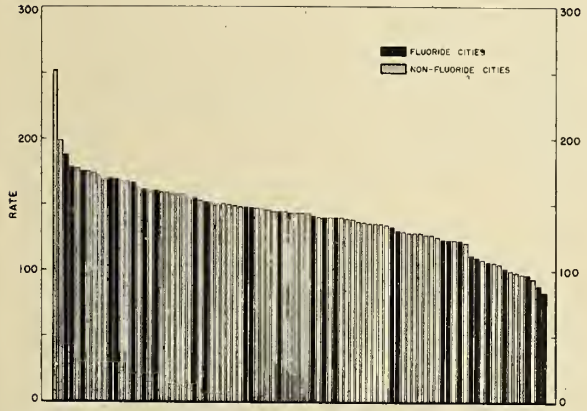


Fig. 9. Deaths* from cancer in fluoride and non-fluoride cities, 1949-1950.



Fig. 10. Deaths* from heart disease in fluoride and non-fluoride cities, 1949-1950.

results relating to the use of 1.0 p.p.m. in the drinking water have been negative. Among the continuing studies are comparisons and analyses of morbidity and mortality statistics for fluoride and non-fluoride areas. A recent analysis of mortality data compiled by the Division of Dental Public Health of the Public Health Service from 1949-1950 Census Reports are shown in Figures 8, 9, and 10. These data relate to death from nephritis, cancer and heart disease, per 100,000 population, adjusted for age, race, and sex, for twenty-eight fluoride and sixty non-fluoride cities. Only cities having a population of 10,000 or greater were selected for the analysis. The fluoride cities have 0.7 or more p.p.m. of fluorine in their drinking water supplies. The non-fluoride city group is comprised of the three cities with fluoride-free water which were closest to each of the fluoride cities. Examination of the data arranged according to death rates reveals a marked homogeneity. More specifically, for nephritis (Fig. 8), thirteen of the fluoride cities fall below and fifteen above the median; for cancer (Fig. 9) fifteen of the fluoride cities are below and thirteen are above; and for heart disease (Fig. 10) sixteen of the fluoride cities are below and twelve are above the median.

Similar mortality data have been compiled for Grand Rapids, Muskegon, and the United States for each of eight successive years beginning in 1943. These data are shown in Figures 11, 12, and 13. In addition to mortality rates for nephritis, cancer, and heart disease, mortality rates for intracranial lesions are included (Fig. 14). Examination of these data reveals the expected greater fluctuations and variability in the Grand Rapids and Muskegon annual rates than for the United

†Decayed, extraction indicated, or filled.

*Per 100,000 population adjusted for age, race, and sex.

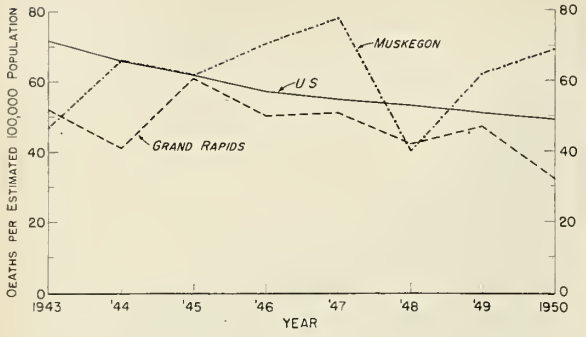




Fig. 11. Mortality rates* for nephritis in the U. S., Grand Rapids, and Muskegon, 1943-1950. (Based on population estimates).

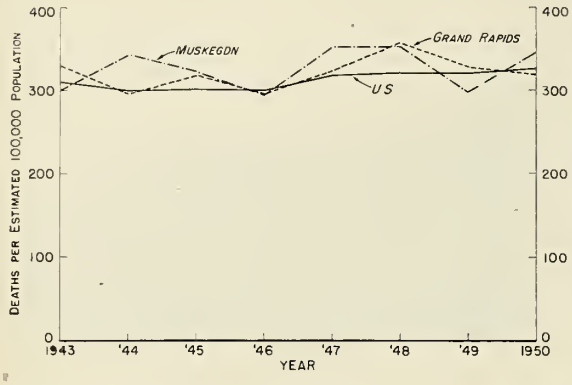


Fig. 13. Mortality rates* for heart disease in the U. S., Grand Rapids, and Muskegon, 1943-1950. (Based on population estimates).

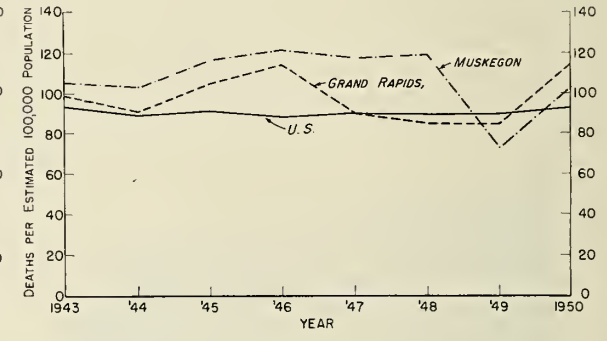


Fig. 12. Mortality rates* for cancer in the U. S., Grand Rapids, and Muskegon, 1943-1950. (Based on population estimates).

Fig. 14. Mortality rates* for intra-cranial lesions in the U. S., Grand Rapids, and Muskegon, 1943-1950. (Based on population estimates).

States. It is of special interest that for nephritis Grand Rapids rates are consistently below those for both the U. S. and Muskegon (Fig. 11). For cancer (Fig. 12), for heart disease (Fig. 13), and for intra-cranial lesions (Fig. 14) both Grand Rapids and Muskegon tend to have higher rates than comparable rates for the United States. However, it is of interest to this evaluation that in each case Grand Rapids rates are either similar or lower than those for Muskegon. Muskegon did not begin fluoridating its drinking water supply until 1951 so that for each of the years covered in these comparisons, 1943 through 1950, Muskegon's drinking water was not fluoridated.

The conclusion for this evaluation is, then, that absolutely no indications or suggestions of undesirable non-dental physiological effects can be attributed to the fluoridation of the drinking water in Grand Rapids during the past eight years. The striking dental benefits have not been offset by any undesirable consequences.

*Adjusted for age, race and sex.

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Fluoridation of the Public Drinking Water

By John E. Summers, M.D.
Grand Rapids, Michigan

C. J. Stringer, M.D., and A. L. Stanley, M.D.
Lansing, Michigan

THE QUESTION of fluoridation of the public drinking water has almost entered the realm of religion and politics in that the discussion of this subject frequently leaves the sphere of scientific discussion. It seems quite well established now that all of the enlightened elements of society stand for the fluoridation of the public water and all of the backward and cultist groups stand against it. Thus, those opposing fluoridation have been classified by the American Dental Association as follows[78]:

1. Drugless healers of all types.
2. Members of a religious group who believe that fluoridation constitutes medication. (This opposition occurs in some areas only.)
3. Those who oppose fluoridation simply because it is advocated by an opposing political party.
4. Those who fear an economic threat to their sale of such things as vitamin and mineral preparations.
5. Obscure "scientists" and self-appointed protectors of the public who object to every public health measure.

However, a review of the known facts might help to illuminate the problem.

History

In 1908, Dr. Frederick S. McKay (Fig. 1), a dentist in Colorado Springs, Colorado, became interested in a disease of the teeth known as "Colorado brown stain." Investigation of the people of Colorado Springs revealed that 80 per cent of those people native to Colorado Springs possessed teeth showing, to a greater or lesser degree, the brownish discoloration of teeth known as "Colorado brown stain." In 1916, Dr. McKay and Dr. Black, a chemist, described the histopathology of "Colorado brown disease." They found that these brownish discolored teeth showed "absence of the cementing substance between the enamel rods, which accounted for the grayish, spotted, and, in some cases, the dead white appearance of the teeth." (Fig. 2). These teeth were also hypoplastic. Because of this grayish splotched



Fig. 1. Dr. Frederick S. McKay, dentist, Colorado Springs, Colorado. In 1908 Dr. McKay became interested in mottled teeth, called "Colorado brown stain." After years of investigation in many communities in America and abroad, he proved that the cause of mottled teeth was in the drinking water.

appearance of the teeth, they were referred to as "mottled enamel." It was not until later, after the cause of the disease was known, that the term "dental fluorosis" was coined.

Through the years, Dr. McKay extended his investigations of "mottled enamel" throughout Colorado, then in South Dakota, Idaho, California, Arkansas, Arizona, Kansas, Illinois, Virginia and then abroad in Europe. He observed that "mottled enamel" occurred in endemic areas and only in those people who were born and had spent the first several years of life in that particular area. He became convinced that the cause of mottled enamel was in the drinking water.

In 1928, Dr. McKay was commissioned by Dr. Grover Kemph, epidemiologist of the United States Public Health Service, to survey the situation at Bauxite, Arkansas. At Bauxite, shortly after the installation of a water system derived from three deep wells, severe endemic mottled enamel made its appearance. In 1928, Dr. McKay,

after an investigation of the area, recommended that the source of the drinking water be changed. The artesian wells were sealed off and water was brought to Bauxite through a four-mile pipe line



Figs. 2 and 3. Photographs loaned through the courtesy of Don McNeil of the Wisconsin State Historical Society, Madison. Mr. McNeil writes: "Enclosed you will find two five-inch by seven-inch photographs of mottled teeth which were taken, I believe, at Britten, South Dakota, sometime in the 1920's. I believe the fluorine content (of the drinking water) as marked on the back of the picture was six parts per million."

from the Saline River. Ten years later, in 1938, Dr. McKay and Dr. H. T. Dean of the Public Health Service, revisited Bauxite and resurveyed the populace. They found that no further occurrence of "mottled teeth" had occurred since the source of the drinking water had been changed. Further, they observed that the caries rate was higher in teeth not "mottled." An analysis of the drinking water of Bauxite in 1931 by H. V. Churchill, chief chemist of the company who owned Bauxite, revealed the presence of fluorine. At about the same time in 1931, Margaret C. Smith, working at the University of Arizona, published her work wherein she had produced "mottled teeth" in experimental animals by feeding and injecting fluorides.

Up until 1937, the primary interest of the dentists had been directed towards eliminating the cause of "mottled enamel," or as it is called since the cause was discovered, "dental fluorosis." Studies of the teeth of individuals living in areas of endemic dental fluorosis and those living in areas where dental fluorosis did not occur and correlation with the fluoride content of the water revealed that where the fluoride content of the water was below one part per million (1 ppm) dental fluorosis (mottled enamel) did not occur.

Also, the observation that dental caries appeared to be less prevalent in areas of endemic dental fluorosis was extended. After 1937, the concept of the fluoride content of the domestic water supply was expressed as follows:

1. Those waters containing the optimal concentration of fluoride, i.e., 1 ppm and requiring no additional fluoride.
2. Those waters containing an excess of fluoride and thus requiring removal of the excess to prevent mottled enamel.
3. Those waters deficient in fluorine, to which fluoride might be added to bring the concentration up to the optimum in order to lessen the amount of dental decay in the community.

Having conceived the idea that the optimum concentration of fluorine in the drinking water to assist in the prevention of dental caries was 1 ppm, the next step was to add fluoride to the drinking water of those communities where the fluorine was lacking.

The first community to have its public drinking water fluoridated was Grand Rapids, Michigan. "The addition of sodium fluoride (N_aF) to the Grand Rapids water supply started in January, 1945. Since that time, the people of this city have been ingesting water with a fluoride content of 1 ppm F."[10] On May 2, 1945, fluoridation of the water supply of Newburgh, New York, was begun. Rather extensive studies of the teeth of the children of these cities and of other areas have been made.[8,10,15,16,35,45,46,48,49,50,53,58,71,119,123]

Up to March 19, 1953, a large number of communities throughout the nation have fluoridated their public drinking water.[43] Some of the larger communities who have fluoridated their public water are Little Rock, Arkansas; San Francisco, California; San Diego, California; Washington, D. C.; Miami, Florida; DeKalb County, Georgia; Decatur and Evanston, Illinois; Fort Wayne and Indianapolis, Indiana; Cedar Rapids and Davenport, Iowa; Louisville, Kentucky; Washington suburban area, Maryland; Baltimore and suburban, Maryland; Grand Rapids, Ann Arbor, Battle Creek, Bay City, Jackson, Kalamazoo, Muskegon Saginaw and Highland Park, Michigan; St. Paul, Minnesota; New Rochelle and Rochester New York; Charlotte, Greensboro and Winston Salem, North Carolina; Fargo, North Dakota; Canton and Youngstown, Ohio; Pittsburgh, Pennsylvania; Providence, Rhode Island; Chattanooga, Tennessee; Corpus Christi and Wichita Falls, Texas; Burlington, Vermont; Norfolk, Richmond and Lynchburgh, Virginia; Wheeling, West Virginia; Madison, Wisconsin (Wisconsin has more communities with fluoridated water than any other state); and Tuscaloosa, Alabama.[43]

It can be seen that the dental profession and especially McKay of Colorado Springs, Dean, Arnold and Knutson of the dental division of the U.S.P.H.S. have been the main springs in the fluoridation program.

Let us now turn to another aspect of the fluoridation problem, i.e., that aspect having to do with the chemistry and metabolism of fluoride.

In 1933, rather complete reviews of fluorine were published by DeEds[35] and McClure[98] and more recently by Hodge and Smith.[76] Fluorine is the lightest and most active of the family of elements known as "the halogens," the other members being chlorine, bromine and iodine.

Occurrence and Distribution

Fluorine is one of the most widely distributed elements. In the first mile of the earth's crust it ranks 12th in occurrence. "Commercial deposits of calcium fluoride or fluorspar occur in Illinois and Kentucky; Ireland and Greenland have important deposits of cyrolite, a double fluoride of sodium and aluminum; and the great phosphate deposits of Florida, Tennessee and Kentucky contain about 4 per cent of the element which is present as fluoapatite, a double phosphate and fluoride of calcium. It is present in most soils and in the bones and teeth of animals. Sea water contains approximately 1 ppm of the element, and it is present in amounts varying from mere traces to significant concentration in a certain percentage of the public water supplies of this country. The brochure prepared by the Council on Dental Health of the American Dental Association presents the figures of Hill and co-workers indicating that of 6,299 public water supplies examined, 1,416 contain in excess of 0.6 ppm of fluoride and many of the remaining supplies contain lesser amounts. Fluorine is present in a great many foods, although the average daily intake from food is small, being estimated by McClure at 0.19 to 0.32 mg."[30] Fluoride is a constituent of "1080," sodium fluoroacetate, a rodenticide.

In fresh bones the fluorine content varies from 1000 to 3900 parts per million. Fossil bones contain from 4,000 to 14,000 parts per million, and the teeth of elephants and mastodons of pliocene ages have 25,000 to 30,000 ppm respectively. The greater the geological age of fossil bones, the greater the fluorine content. This fact has been utilized to estimate the geological age to which a fossil belongs. This increasing content of fluorine with geological age has been attributed to the formation of the insoluble calcium fluoride, the fluorine being derived from the water coming in contact with the skeleton.[55]

Metabolism of Fluorine

A large amount of work on experimental animals has been done to find out the actions and the effects of fluorine on the body[11,41,59,85,90,100,105,111,116,118,122].

Fluorine has been demonstrated in all tissues. "However, the constant occurrence of fluorine in tissues does not constitute proof that fluorine has a biological role. In view of the widespread distribution of fluorine in soils, waters and plants, it is entirely possible that the presence of fluorine in animal tissues is an expression of the inevitable tendency to establish a chemical equilibrium between the organism and its environment."[55]

The body attempts to dispose of fluorides in two ways: (1) by excreting it in the urine, (2) by storing it in the bones and teeth. This fixation of the fluoride in the skeleton is a very firm one. The deposition of fluoride in the bones is an accumulative one.

The bones of older individuals contain more fluoride than those of the younger. Experimen-

tally, the fluorine retained from sodium fluoride varied with the total fluorine ingested in a straight line relationship when fluorine is administered in the drinking water.[79]

The action of fluorine on the body is described as that of *acute poisoning and chronic poisoning.*

Acute Poisoning

Acute poisoning with fluorine has occurred upon the ingestion of roach poisons containing fluorine. "The pathologic picture is one of hemorrhagic gastroenteritis and acute toxic nephritis accompanied by more or less damage to the liver and other organs. Some of the signs and symptoms have been ascribed to a lowering of the blood calcium, but others result from the inhibitory action of the fluoride ion upon the activity of one or more enzymes that function in the sequence of reactions by which the energy of carbohydrates is made available for the metabolic activity of the tissues."[74] According to DeEds[55] the average acutely fatal dose of the fluorides for mammals is, orally, 0.5 gram per kilogram of body weight.

Chronic Poisoning (Chronic Fluorosis)

As mentioned above, chronic poisoning has been produced in experimental animals for many years. Chronic fluorosis has been reported as occurring in sheep, cattle and goats pastured on land where the vegetation was contaminated by fluoride bearing dusts derived from phosphate deposits.[74] Animals so poisoned have spotted teeth, thickened bones and become lame and weak.

Chronic fluorosis in the human has been investigated and described.[3,7,8,17,29,32,39,46,47,56,72,76,77,87,88,92,97,99,112,117,121,126,134]

Roholm[34,121] described chronic fluorosis occurring in cryolite workers. From his studies, he was able to state[121]

"If the result of the röentgen examination is to be summarized, the first thing to emphasize is the fact that the affection is a system disease, for it attacks all bones, though it has a predilection for certain places. The pathological process may be characterized as a diffuse osteosclerosis, in which the pathologic formation of bone starts both in periosteum and in endosteum. The compacta densifies and thickens; the spongiosa trabeculae thickens and fuse together. The medullary cavity decreases in diameter. There is a considerable new bone formation of bone from periosteum and in ligaments that normally do not calcify or only in advanced age undergo a considerable degree of calcification. All signs of bone destruction are absent from the picture." More recently Largent et al[87] have reported on "Roentgenographic Changes and Urinary Flouride Excretion Among Workmen Engaged in the Manufacture of Inorganic Fluorides."

However, the x-ray alone is not sufficient to detect early changes in the bones and joints from fluoride poisoning. Thus, Largent and co-workers,[90] who have performed original research into this problem, state:

"Rabbits were fed diets containing fluorine to the extent of 12 to 50 mg per day for a period of sixteen to ninety-two days. Macroscopic bone changes developed in every animal so fed, and the fluoride content of the skeleton increased greatly. Roentgenographic examination failed to reveal the presence of these early bone changes. The new bone resulting from excessive absorption of fluorine by rabbits has a non-specific basic architecture that bears a general resemblance to the callus resulting after fracture."

Action of Fluorine on the Teeth

Fluorine is deposited in the enamel of the teeth before eruption and stays there.[4] "To date, available data indicate that the benefits derived from ingested fluorine-water occur during the years of tooth development; that is, through the first eight years of life (excluding the third molars). After the teeth have calcified fluorine ingested inpotable water is apparently not effective."[12] The hypoplastic effects of fluorides on the developing tooth enamel can only be produced during the years that the enamel organ is functioning.[20] "Mottling of the enamel has been studied in some detail histologically; the hypoplasia results from the failure of the ameloblast to function properly. The columnar cells are altered in appearance, sometimes becoming flat and cuboidal: this is a nonspecific response that has also been observed following mechanical injury and in certain vitamin deficiencies."[76]

Another aspect of dental fluorosis is brought out by Smith and co-workers[129] who independently discovered that fluorine was the element in the water responsible for mottled enamel:[128] "To one who is familiar with the disfiguring dental defect known as mottled enamel which affects the teeth of every person who drinks water containing as little as 1 ppm of fluorine during the years of tooth formation, this recommendation (to add fluorides to the water) seems, to put it mildly, unsafe. There is ample evidence that mottled teeth, though they be somewhat more resistant to the onset of decay, are structurally weak, and that unfortunately when decay does set in, the result is often disastrous.

TABLE I.[10] DENTAL CARIES FINDINGS, DECIDUOUS TEETH

Dental caries findings, deciduous teeth in Grand Rapids and Muskegon, Michigan, school children, four to thirteen years of age, according to year of examination. The Grand Rapids water supply was fluoridated in January, 1945. The Muskegon water supply contained no fluorides.

Age Last Birthday	Number of Decayed, Extraction Indicated, or Filled Deciduous Teeth Per Child			
	Basic Examinations 1944-45 Grand Rapids	Basic Examinations 1944-45 Muskegon	Grand Rapids 1951	Muskegon 1951
4	4.186	5.050	2.131	4.460
5	5.369	6.820	2.273	5.248
6	6.431	7.167	2.977	5.667
7	6.293	6.663	4.031	5.771
8	5.782	6.061	4.908	5.320
9	4.591	4.885	3.856	4.173
10	2.837	3.084	2.426	2.855
11	1.345	1.328	1.162	1.460
12	.473	.422	.295	.312
13	.176	.234	.117	.147

From Table I, we note that during the basic examinations before the Grand Rapids water supply was fluoridated that the Muskegon children had more carious teeth per child than the Grand Rapids children. For the effect of fluoridated water, note that in 1944-45 in Grand Rapids, prior to fluoridation, the average seven year old child had 6.293 carious teeth. After fluoridation, the average seven year old child had 4.031 carious teeth. In Muskegon in 1944-45 the seven year old child had 6.663 carious teeth. In 1951 (water not fluoridated), he had 5.771 caries. Thus, there was some decrease in caries in Muskegon, although the water remained without fluorine.

TABLE II.[10] DENTAL CARIES FINDINGS, PERMANENT TEETH

Dental caries findings, permanent teeth, in Grand Rapids and Muskegon, Michigan, school children, five to sixteen years of age, according to year of examination. Recall that the Grand Rapids water supply was fluoridated in January, 1945, while the Muskegon water supply remained free of fluorine.

Age Last Birthday	Number of Decayed, Extraction Indicated, or Filled Permanent Teeth Per Child			
	Basic Examinations 1944-45 Grand Rapids	Basic Examinations 1944-45 Muskegon	Grand Rapids 1951	Muskegon 1951
5	.109	.065	.048	.117
6	.775	.811	.259	.799
7	1.886	1.988	.844	1.879
8	2.945	2.810	1.577	2.629
9	3.898	3.808	2.040	3.516
10	4.921	4.906	2.929	4.323
11	6.409	6.318	3.669	5.338
12	8.073	8.655	5.886	7.708
13	9.734	9.981	6.600	9.364
14	10.945	11.995	8.211	11.356
15	12.482	12.862	8.906	12.381
16	13.499	14.068	11.061	13.161

From Table II, the examination of the permanent teeth of the seven year old children in 1944-45 revealed 1.886 carious teeth per child. In 1951, after fluoridation, the average seven year old had .844 carious teeth. In Muskegon in 1944-45 the average seven year old had 1.988 carious teeth. In 1951 (water not fluoridated) he had 1.879 carious permanent teeth. You will see that the 16 year old child in Grand Rapids, prior to fluoridation, had 13.499 carious teeth, and after drinking fluoridated water for six years, the average 16 year old had 11.061 carious teeth. In Muskegon, he had 14.068 carious permanent teeth in 1944-45 and 13.161 carious permanent teeth in 1951 (water not fluoridated).

The chart graphically presents the results of a survey of the situation in St. David, Arizona, a community where water supplies range from 1.6 to 4.0 ppm of fluorine. This survey included the adult group so that a truer picture of the durability of mottled teeth could be obtained.

It may be seen that although only 33 per cent of the children in the age group from twelve to fourteen years showed any caries lesions, the percentage of persons with carious teeth increased with age as was to be expected. Beyond the age of twenty-one years, there were relatively few individuals in which caries had not developed. That the result of the onset of caries was especially severe is reflected in the high percentage of all age groups with extracted teeth. Caries once started evidently spreads rapidly. Steps taken to repair the cavities in many cases were unsuccessful, the tooth breaking away when attempts were made to anchor the fillings, so that extraction was the only course. That decay was widespread and repair was highly unsuccessful among the young adults is shown by an incidence of more than 50 per cent of false teeth in the age group twenty-four to twenty-six years. This high incidence of false teeth appeared in all subsequent age groups."

Whereas very extensive studies revealing the allegedly beneficial caries reduction action of fluoridated water on the teeth of children have been reported,[8,10,15,16,35,45,46,48,49,50,53,58,71,119] practically nothing has been published on the teeth of adults who have lived in an area of endemic fluorosis.

Affect of Fluoridated Water on Human Beings

The main question is: What will be the effect on the human body after many years of ingestion of water containing fluorides 1 ppm? Since it has been estimated[82] that over 3,000,000 Americans have lived all their lives in naturally fluoridated areas, one would naturally assume that investigation concerning the bones and joints of these peoples would have been made. Unfortunately, very little research other than that pertaining to the teeth of children has been performed.

McClure[102] studied the records of a large number of young army inductees and found that those coming from areas of endemic fluorosis compared favorably as to bone-fracture-experience, height

and weight with those boys coming from areas where there was no dental fluorosis.

Schlesinger et al[123] are reporting on a study of the children of Newburgh, New York, where fluoridation of the drinking water was started on May 2, 1945. X-rays of the right hand and both knees of each child included in the study each year have been taken and interpreted by an impartial observer as showing no abnormality.

Arnold[7] reported that radiologic survey of 114 persons who had lived for at least fifteen years at Bartlett, Texas, where 8 ppm fluoride in the drinking water was present, revealed some increase in the bone density of the bones in 12 per cent of those examined.

Comment

It has been recommended that the public drinking water be fluoridated to 1 ppm in order to decrease dental caries in children. As a result of the "Seventh Year of Grand Rapids-Muskegon Study"[10] it is reported: "There has been a reduction in dental caries rates in permanent teeth of Grand Rapids children ranging from 66.6% in 6-year old children to 18.1% in the 16-year age group. Similar results have been obtained regarding the deciduous teeth." A review of Tables I and II taken from this report is quite interesting. A study of these tables reveals some decrease in dental caries in both Grand Rapids and in Muskegon. (Muskegon children were used as controls, as their water supply was not fluoridated.) The figures show a greater decrease in dental caries in Grand Rapids after the water supply was fluoridated. One wonders what other factors could be involved to promote this slight decrease in dental caries. The average eight-year-old child in Grand Rapids prior to fluoridation had 2.945 carious permanent teeth. After drinking fluoridated water for seven years, the average eight-year-old child had 1.577 carious permanent teeth, a reduction of less than 50 per cent. The average sixteen-year-old child in Grand Rapids, prior to fluoridation, had 13.499 carious permanent teeth. After drinking fluoridated water for seven years, the average sixteen-year-old had 11.061 carious permanent teeth. This certainly shows that fluoridation is not the whole answer to dental caries, and certainly does not help after the eighth year of life.

Fluoride, even when ingested in small amount, is deposited in the skeleton. In this regard Smith et al[127] state: "A critical evaluation of a number of pertinent papers published during the past fifteen years, together with certain observations in our own laboratories, suggest that in individuals continually ingesting small amount of fluoride about 33 per cent of the dose is deposited in the skeletal system." Rib and vertebral samples from eighty-five males and seventy-three females who had ingested the Rochester water containing 0.06 ppm F revealed[127]: "The bone fluoride concentration is seen to increase in a regular fashion with increasing age."

The fact that the teeth of some of the children who ingest 1 ppm fluoridated water show mild dental fluorosis is evidence that excessive fluoride intake is present even in early childhood. Whereas, the fluoridated water has no further action on the teeth after eight years of age, the skeleton continues to store fluoride as long as fluoridated water is taken. Some further investigation in this matter is desired and can be expressed by quoting Hodge and Smith[76]:

> "In areas of the country where drinking waters are naturally fluoridated, large population groups have been exposed for generations with no readily evident ill effects (save mottling of the enamel when more than 2 ppm of fluoride are present). Careful epidemiological studies are needed to prove statistically this impression. More information is needed on the incidence and severity of diseases, such as arthritis, that might conceivably have some component of skeletal change involved. More information is needed on the occurrence of anemia, thyroid disease, kidney disease, as well as of oral disease."

Summary

The dental profession in their very laudable desire to decrease dental caries have publicized the fact that children reared on fluoridated (1 ppm) water will have less dental caries. A review of the statistics from the Grand Rapids-Muskegon study (Tables I and II) shows that the decrease in dental caries after fluoridation of the drinking water is not nearly as much as one is lead to believe. One wonders just how much fluoridation has to do with the decrease in dental caries. It is clear that fluoridation is not a cure-all for dental caries. The biochemists who have carried out research work on the skeletal retention of fluorides have not been able to give their unqualified support to the drinking water fluoridation program. Several facts stand out in this matter. First, fluorides, even when ingested in low concenration, are deposited in the bones and teeth. It has been

shown experimentally that microscopic changes occur in bones and joints of animals fed fluorides before any changes are seen on x-ray examination. Extensive bone changes have been reported in people who have ingested excessive amounts of fluorides. What changes in the bones and joints and other organs will occur after fluoridated water (1 ppm) has been ingested for twenty years? This problem certainly should be investigated. Those peoples interested in arthritis should investigate this possibility. Second, the ingestion of fluoride admittedly is beneficial only during the first eight years of life, before the eruption of the permanent teeth. There is no evidence available to indicate that adult teeth are benefited by the continued ingestion of fluoride. (Note the 18.1 per cent reduction in caries in the sixteen-year-old age group in Grand Rapids and the 15.5 per cent decrease in the Muskegon eleven-year-olds). Since fluoride has no known beneficial effect on the body, and in certain instances and in certain concentrations is detrimental, is it reasonable that a person should continue to ingest fluoride all his life for a possible 50 per cent reduction of dental caries in his early years? Third, is it true, as has been reported by the original investigators,[128] that the teeth of adults who have been reared in areas of endemic fluorosis show no decrease in dental caries, are more brittle than normal and that a high percentage of such young adults have false teeth? This matter should certainly be investigated. Fourth, there is great danger of acute fluorosis occurring in those individuals who feed the sodium fluoride into the machines fluoridating the public water unless strict precautionary measures are observed.

In consideration of these observations, it is suggested that further extension of the fluoridation program await more accurate clarification. The alleged beneficial effects of fluorides on the teeth of children can be obtained by local applications and other ways. At the same time, the value of proper diet, vitamins, brushing the teeth and frequent dental inspections should not be forgotten.

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CURRENT STATUS OF RESEARCH ON VACCINATION AGAINST POLIOMYELITIS

(Continued from Page 985)

the conditions favored the appearance of mutants and the selective overgrowth of those which would multiply most rapidly in the nonneural tissue. When this was done twenty or more times, there appeared a distinct modification in the virulence of the cultures. Quantitative tests suggested that these cultures might consist of a mixture of a very large number of avirulent virus particles and a smaller number of virulent ones. By diluting such cultures 10 million times it was possible to obtain the offspring of the particles present in greatest numbers. These purified cultures did not possess the virulence of their ancestors for the nervous system of the monkey, but multiplied very extensively in the kidney tissue cultures outside the body; the presence of virus was, in fact, recognized by the destructive effect on the epithelial cells growing out of the kidneys in tissue culture. However, when these cultures were injected into living monkeys they produced no detectable effects on the kidneys or other organs, but did produce immunity against their highly virulent ancestors. Studies are now in progress on the properties and genetic stability of these viruses and the conditions under which they can be regularly cultivated in avirulent form. Studies are also in progress on poliomyelitis viruses carried by healthy children during nonepidemic times to determine whether or not nature might not already have selected more stable avirulent variants than it may be possible to produce experimentally. The outcome of these studies will indicate whether or not it will be possible to use avirulent strains to provide human beings with long-lasting immunity against the paralytic consequences of poliomyelitis.

Poliomyelitis has been with us a long time and produces serious disease in only a small proportion of the population. In my opinion, therefore, these promising studies should proceed as rapidly and extensively as possible, but without undue haste in attempting to transfer them or to apply them to millions of human beings.

A New Conception of Acne

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THIS dermatosis has been aptly designated as the "plague of youth," for it attacks in the majority of cases, early adolescents of both sexes. The etiology of this affection is still a mooted one. Formerly, we were prone to attribute acne to five salient underlying factors: (1) the sexuo-menstrual factor, (2) focal infection, (3) gastrointestinal disturbance with a subheading of faulty diet, (4) allergy, and (5) multo-vitamins.

None of these seems to fit, however, in the vast number of cases observed in practice; we meet with many individuals of early adolescent age, or at the onset of puberty, who are perfect specimens of health, wherein the above-mentioned factors could be readily eliminated. Thus, the treatment heretofore advocated and resorted to for the removal of the above-mentioned causes, prove unsatisfactory. Neither a strict dietary regime, nor the administration of autogenous or stock vaccines for focal infections as the cause of and the disease *per se,* nor estrogenic hormones, inclusive of corpus luteum intramuscularly, neither the latest fad of pluro or multo-vitamins administration have been of little value in this cutaneous affection, nor have the mycins been of greater value, or the administration of arsenic in chronic cases.

A new school of thought has developed in recent years, which takes the position that—*although* taking the above etiologic factors into consideration, they are at best, subsidiary or contributing causes—places great emphasis upon the local origin of acne.

During the advent of puberty or adolescence, all the secretory, excretory and incretory glands of the body seem to run riot in a most flagrant manner; to be more specific, the sebaceous glands of the face, scalp, shoulder and back predominate in this process of exuberant growth. These glands furnish an oily secretion-sebum, which is a normal function, serving as a lubricant to the body surface. Early adolescence, however, enhances this function and another picture presents itself to us, viz., the clinical manifestation of acne. This condition is aggravated by the early use, misuse and abuse of cosmetics, to which girls at an early teen age become accustomed. These cosmetics form plugs in the sebaceous ducts, that lead from the glands to the cutaneous surface, thwart the natural absorption of ultra violet emanations from the sun to flood the skin. Deprived of this salubrious influence of the actinic rays, micro organisms readily develop at the site of or underneath the plugs, creating the clinical picture of comedones and the various types of acne, such as acne simplex or folliculitis, acne vulgaris, acne varioliformis, et cetera. Unna, Sabouraud and Gilchrist all recognized this process; in fact, Gilchrist and Unna both isolated a baccilus, which they named the baccilus of acne or Unna.

With this concept in mind, our treatment has radically changed: instead of attacking acne from within, we must do so from without and thus resort to various extraneous modi operandi, such as lotions, ointments, mild medicinal soaps, radio-active substance such as uranium, x-ray treatments, ultra violet exposures and vapo-therapy, etc., not excluding the important factor of extracting the plug or comedone, commonly called the blackhead, by the comedo spear or extractor, of course, under aseptic precautions, *supplemented by the discontinuance of facial cosmetics.*

These last mentioned methods have proven of considerably greater value than any internal medication originally used by dermatologists. Acne ordinarily disappears spontaneously as the individual grows older, in most cases when the person reaches the age of twenty-five; and thus *tempus curat* has demonstrated to be the best therapeutic agent; but unfortunately youth is rather self-conscious and sensitive about appearance, particularly girls, and to prevent an inferiority complex in causing injury to their developing minds, the process of time should be assisted by the local therapy suggested above, which can be accomplished very easily.

Summary

If the early dermatological authorities, particularly Unna, Sabouraud and Gilchrist were alive today, they would undoubtedly accept the rational treatment of acne by the local therapeutic agents mentioned above, such as lotions, ointments, mild medicinal soaps, radio-active substances such as solutions of uranium acetate 2 per cent, x-ray treatment, ultra violet exposures and vapo-therapy.

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Sensory Precipitation of Seizures

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WHILE the study of epileptic mechanisms is at best a difficult undertaking, the results obtained from such investigations may be regarded as doubly rewarding since in revealing the epileptic process they simultaneously provide us with valuable data on the mechanism of brain function. This is nowhere better illustrated than in the work of Hughlings Jackson concerning the site of origin of epileptic seizures which opened the way to our understanding of localization of function in the cerebral cortex.

We may expect to derive similar rewards from a study of the factors which precipitate epileptic seizures and, of course, there has been great interest in this aspect of epileptic mechanisms from earliest times. From the research point of view, patients with seizures whose precipitants can be clearly recognized, provide valuable material since in many instances their seizures can be reproduced under conditions of optimum observation such as movie and electrographic recording and in this way details of the mechanism are likely to be clearly revealed. From the practical clinical standpoint the information gained may be of considerable value in the treatment of the patient.

I would like to illustrate these ideas with a description of some cases which have been investigated in our laboratory over the past six or eight years. The commonest sensory mechanism evolved in the precipitation of seizures is the optic system and the fact that light could induce seizures was probably known to the Greeks and two such cases were described by Gowers in 1888. A diligent search for light sensitivity among an unselected group of epileptic patients will probably reveal its presence in some 3 to 5 per cent of all patients.

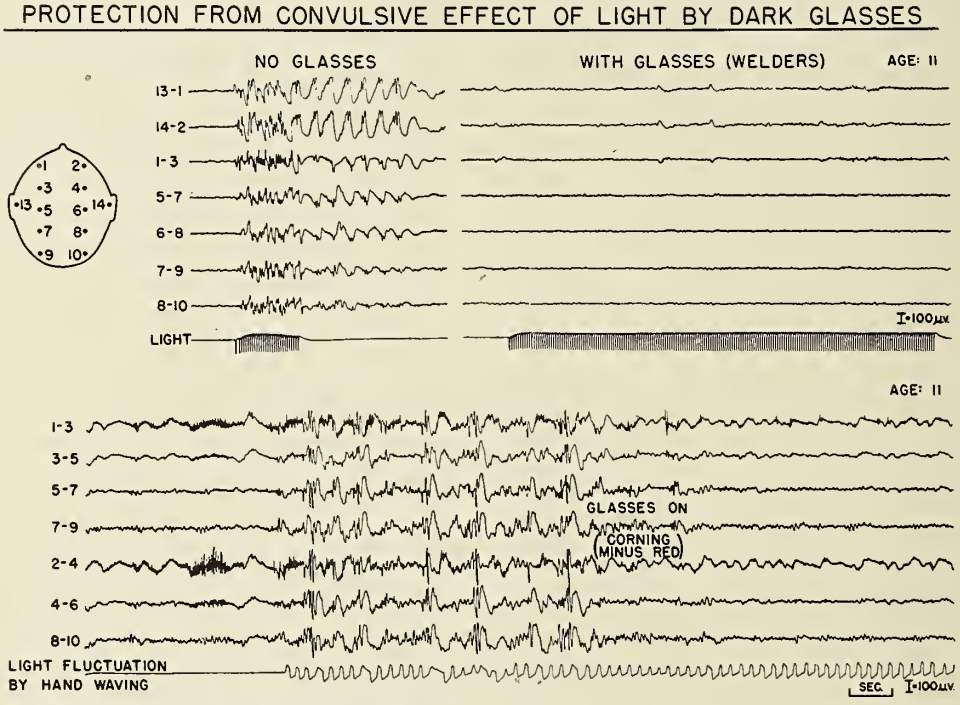


Fig. 1. Upper tracings illustrate light sensitivity in an eleven-year-old epileptic boy. A seizure discharge is produced by stimulating with flashing light and on the right the protection afforded by welders' glasses is shown. These suppress the response.

The lower tracings are from a different eleven-year-old boy who induced his attacks by hand waving when facing a bright light. Waving of hand is shown by tracing from photocell placed below left eye. This patient was sensitive to rer light and could be protected by Corning minus red spectacles as shown on the right.

Presented at the Michigan Clinical Institute, Detroit, on March 12, 1954. From the Laboratory of Electroencephalography, Mayo Clinic, Rochester, Minnesota.

On the clinical side, this syndrome is manifest by some rather typical complaints, such as: "Car headlights give me a spell"; "I get a lot of spells on bright sunny days or when there is snow on the ground." In most instances, the type of attack induced is petit mal but there may be a predominant myoclonic component as in the case of a schoolgirl who dropped her books on the front doorstep every morning. In this instance, the change in illumination associated with opening of the front door resulted in a myoclonic jerk of the arms, and

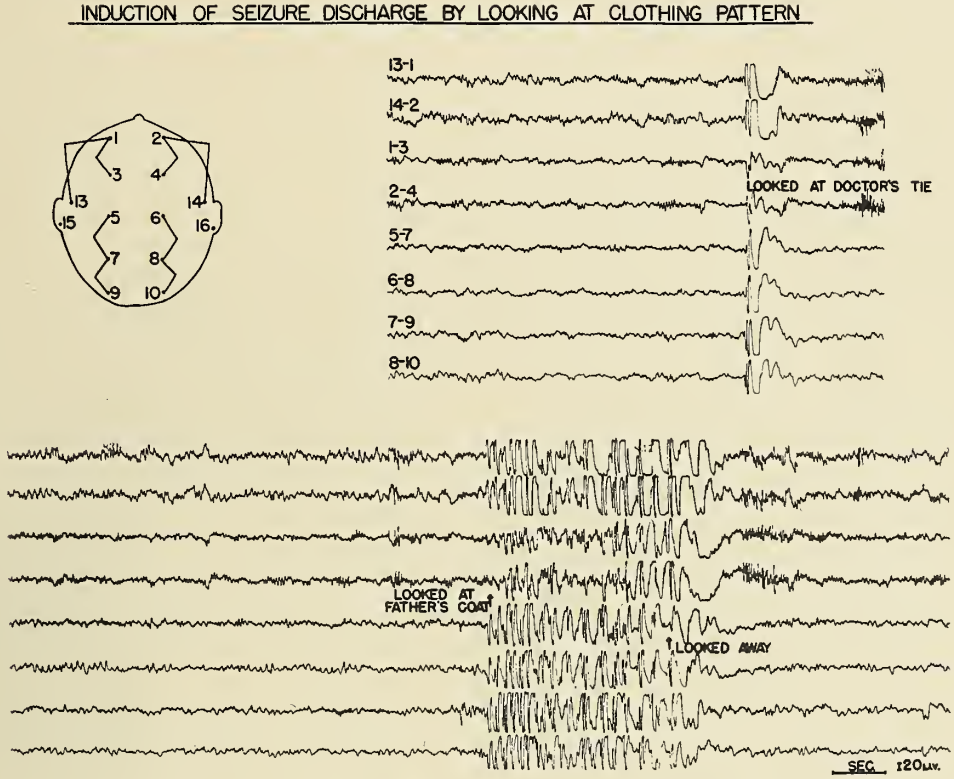


Fig. 2. An eight-year-old child who had petit mal attacks brought on by looking at patterned clothing. Note the occurrence of a multiple spike-wave seizure discharge on looking at the doctor's tie or his father's coat. Seizure discharge stops as child looks away.

this mechanism was clearly revealed in laboratory testing. Another frequent story is that of jerking associated with driving in an automobile through an avenue of trees when the sun is low. The electroencephalogram of these patients usually shows a diffuse spike and wave type of discharge which may only be revealed under conditions of light stimulation, such as that produced by a flashing Strobatron light. This type of stimulation will usually provoke the diagnostic spike and wave discharge together with its clinical accompaniment (Fig. 1. Upper tracing).

Some of these light-sensitive patients show an interesting seizure mechanism, which we first observed in 1948. A patient came to us with the story that his mother noticed that on bright sunny days her six-year-old son would often be seen to face the sun and begin a waving movement of his right hand in front of his eyes. On closer observation, she saw that during the waving the child's eyes stared and turned tonically to the left and that he became confused and failed to answer questions. On one occasion, the maneuver gave rise to violent jerking of his limbs which was followed by a long period of unconsciousness. On examination, this child would repeatedly reproduce his hand-waving maneuver when facing a bright electric light. His EEG indicated a marked degree of sensitivity to a flashing light as in the other cases that we have just discussed. The interesting feature in this case, however, was the habit the child had developed of initiating his attacks by waving his hands. These children are usually reticent when questioned concerning the reason that they induce these attacks, though in some instances it appears probable that they derive pleasure from the maneuver. In other instances, compulsive fac-

tors are prominent and these cases form excellent examples of psychosomatic syndromes, the psychological component being grafted on to a basic organic light sensitivity.

The treatment of these light-sensitive epileptics raises a number of interesting points. Some of the patients have their attacks only in relation to light stimulation, and in these instances the attacks can be prevented by appropriate protective measures. Tests of spectral sensitivity have shown that in some instances it is only the red component of light that is involved in the convulsive effect, and excellent results may be obtained by prescribing glasses which exclude the red end of the spectrum. One of the most effective of these is the Crookes minus red lens (Fig. 1. Lower tracing). In the more usual case of a wide spread spectral sensitivity, a neutral tinted glass has to be employed, and the over-all reduction in illumination will have to be considerable. The effect of corrective glasses was evident in two of these patients. Both made excellent progress with dark glasses and one has been entirely free from seizures, even though medication has remained unchanged.

In rare instances, visually induced seizures require a more highly organized and physiological stimulus than the rather crude repetitive light stimulus of the cases described above. We have seen one such patient. He was a boy, aged six years, whose parent had noticed that frequently when he walked down the street, he would stop and begin staring at someone's clothing. The materials which attracted him most were large plaid squares, and his parents noticed that the staring attacks were associated with turning of his eyes and inability to respond to questions. The story suggested that he might be sensitive to visual patterns, and on testing in the laboratory this was indeed found to be the case (Fig. 2).

We have seen a few cases in which an even more specific stimulus is required to bring on an attack. These are cases of epilepsy related to reading, and it is with particular interest that I bring these cases to your attention because I was fortunate in having the assistance of Dr. Joseph Whelan, who is now in Detroit, in their investigation. These patients give the story that prolonged reading will give rise to their attacks, which usually consist of generalized convulsions preceded by an aura of "clicking" or movement in the jaw. If the patient stops reading when the clicking is first felt, the attack usually passes off without leading to a generalized convulsion. In the three cases we have investigated, these patients do not have seizures under any other condition than that associated with reading, and it is clear that we are dealing with a highly specific stimulus which must presumably be acting at a fairly high level of neuronal integration.

Let us leave the visual system now and consider shortly some examples of seizures that may be induced by a sound stimulus. The commonest of these are seizures that result from startle effects of an unexpected or unusually loud sound stimulus.

Perhaps the most interesting, though the rarest, of the sound-induced seizures, is the so-called musicogenic seizure. An example of this kind of attack is described in the sound movie which will now follow. (Motion picture shown.) This patient showed a minimal left temporal focal dysrhythmia in her resting electroencephalogram and during the seizure there was a generalized discharge of the kind usually seen in temporal lobe automatisms. It was thought that the patient had a left temporal lobe lesion, probably atrophic in type, though we did not have an opportunity of confirming the diagnosis by surgical exploration.

I would like to conclude with a suggestion to clinicians to be constantly on the alert for precipitating factors in their patients' seizures. In many instances, these will not be discovered unless specific questions are asked covering the various categories of precipitation. The patient is much more likely to volunteer that nonspecific factors, like fatigue or worry, bring on his attacks than he is to have noted that, for instance, his attacks occur only on sunny days. The electroencephalographer will also miss the diagnosis in these cases, unless he is prepared to record the electroencephalogram under varied conditions of stress in contrast to the classical recording condition of relaxation and the more recent recommendation of sedation and sleep. This is what I like to call "dynamic electroencephalography" and this technique can show its true potentialities only when there is really close liaison between clinician and electroencephalographer, or where they are represented by the same person. I firmly believe that simple but detailed studies of individual patients of this kind are more likely to lead us to an understanding of epilepsy than the ill-digested statistical conglomerations of clinical and electroencephalographic data that presently clutter and choke our scientific journals.

Child Psychiatry in Pediatric and General Practice

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PSYCHIATRY has moved ahead very rapidly in the past several decades and, as in the case of many young sciences, developments have occurred sometimes so fast that it has been difficult to keep abreast of them. The major stimulus to this rapid growth came from World War II experience which in a dramatic way focused attention on basic mental health realities. While the earlier concern of psychiatry was largely with problems of severe and chronic mental illness the emphasis has shifted to the study and treatment of milder emotional disturbances and practice outside the State hospital. Along with these broadened efforts at psychotherapy, there has been increasing concern with problems of etiology and prevention. Research interest has centered on such basic issues as the development and structure of the personality and the etiology of adult dysfunctions. This has led inevitably to investigations into the dynamics and problems of childhood and the field of child psychiatry has grown rapidly in response to many challenges.

Beyond the research area, our wartime experience had a profound effect on the general attitude in America toward psychiatry and psychiatric treatment, and this is reflected in greater demand for clinical services. In the children's field, there have been many developments within communities, oriented toward early case finding and treatment of emotional disturbance. Thus, we have observed the development and expansion of child guidance clinics, family service societies and other casework resources, diagnostic and treatment facilities within the schools, special juvenile agencies and youth bureaus within the Courts and other analogous efforts in varying settings. Many of these developments are new and have occurred in response to a definite need manifested by the large number of children disturbed or delinquent in our communities. They all represent mental health facilities, hopefully preventive in focus, but usually, by necessity, called upon after troubles have developed; in many ways they are preventive more in theory than in practice.

In contrast to these new community media, there is an old mental health resource, as old as the practice of medicine itself, the rôle of the practitioner in the lives of his patients. While psychiatric theories have changed through the years and new facilities and methods have evolved, the major opportunity for implementing mental health principles remains, as it has through the centuries, in the hands of the good physician. True, the orientation of medical practice has at times made it difficult for the practitioner to play his optimal role in psychologic medicine but, despite the vicissitudes, the challenge is none the less great. It is, in fact, today greater than ever, because our families are more aware of the rôle of emotions in health and disease, and this is nowhere more apparent than in the area of child care.

It is almost impossible for the average young couple today to escape some consciousness of the culture's preoccupation with good and bad methods of child rearing and for them to avoid personal preoccupation with these issues. Many parents today are, in fact, confused and mothers especially tell us that they feel threatened. They cannot pick up a magazine without reading some dire warning of ways in which they may be ruining their child, and for all time. They are self-conscious and their spontaneous enjoyment of their children is impaired by too much random self-evaluation and fear. If you mention the word "mother" today to an oriented group of parents, they will associate with the word "mother" only "rejection" or "over-protection" as though love were no longer in operation or in vogue. Mention the word "sibling" and the response will be an unqualified "rivalry," as though this were the only reality in sibling relationships. Recently, fathers have come in for more study, and important and valid as these studies are, we shudder to think of the associations to "father" that mothers' study groups will be producing in the coming years. It would seem that efforts at public education in psychological insights have been only partially successful and in some ways have done harm. Benjamin Spock has this to say about the problem:

From the Neuropsychiatric Institute, University of Michigan, Ann Arbor.

"Our respect for scientific authority has created anxiety in that it has robbed young parents of a natural confidence in their ability to take care of their children and made them vulnerable to every shift of scientific discovery and opinion."

Similarly concerned, Leo Kanner writes:

"Wholesale accusations of villainy and treachery have tended to make the contemporary mother uneasy about her maternal role, have driven her to abandon her reliance on her own genuineness and naturalness, have sent her off to gulp down a mixed diet of literature on child rearing which floods the market, and have forced her to examine guiltily every act, every move, and every word addressed to her child. . . . Mothers need less universal censure, less wholesale condemnation and more sympathetic understanding."

Most pediatricians and child psychiatrists agree with Drs. Spock and Kanner but the problem is by no means simple. We live in an age of scientific curiosity, of the glorification of the know-how and we want the stamp of scientific approval on the refrigerator or car we buy, the school to which we send our children, and, no less, the methods of child care which we embrace. Parents feel a need for guidance today, and medicine must provide this guidance with full awareness of both the positive and negative potentials in the methods we use. From experience in recent years, it seems evident that education in child care on a mass level is fraught with many dangers; the more individualized the approach, the more effective and therapeutic. The responsibility, then, for this education rests with the individual physician, and it is in the insightful performance of this function by physicians that we shall find the antedote to the present destructive mass scare techniques.

On the other hand, it may be that parents have sought advice in popular magazines and lectures because medicine has not met adequately the public's need for guidance. The reasons for this are many, and a major one has been a sense of doubt, suspicion or frank hostility toward psychiatric principles on the part of many general practitioners and pediatricians. These attitudes stem in part from the fact that psychiatry is so young a science within the body of medicine and is regarded by many as untried and unproven. Sometimes, too, the language of psychiatry, often closer to Greek than to English, has represented a barrier to interest and understanding, and sometimes psychiatry has been so preoccupied with theory that it has confused potential friends who have beat a hasty retreat from esoteric speculation. But psychiatry is coming of age, and certainly child psychiatry is becoming increasingly aware of these factors and, with maturity, is doing something about them. Both our concepts and our language are being simplified, and we are working toward better methods of integrating what definitive knowledge we have—and this is by no means insignificant—into the general body of medicine.

The task, then, of attempting to maintain and further mental health in our culture through the implementation of optimal child care practices within families falls to the practitioner or pediatrician who has direct contact with the parents and child. Of the fact that here lies the primary key to preventive psychiatry, there can be no doubt. Prospects in this area are all the more intriguing, because of the changing nature of medical practice. With immunization preventing a growing number of diseases, with new knowledge of dietary needs, new methods of handling premature infants, and with infectious diseases handled by antibiotics in a way not dreamed of just a few years back, the emphasis of the future will be on preserving and enhancing health rather than on treating disease. To exclude emotional health of children would be both tragic and irresponsible; if medicine should do so, some other discipline will preempt the function, a trend already in evidence.

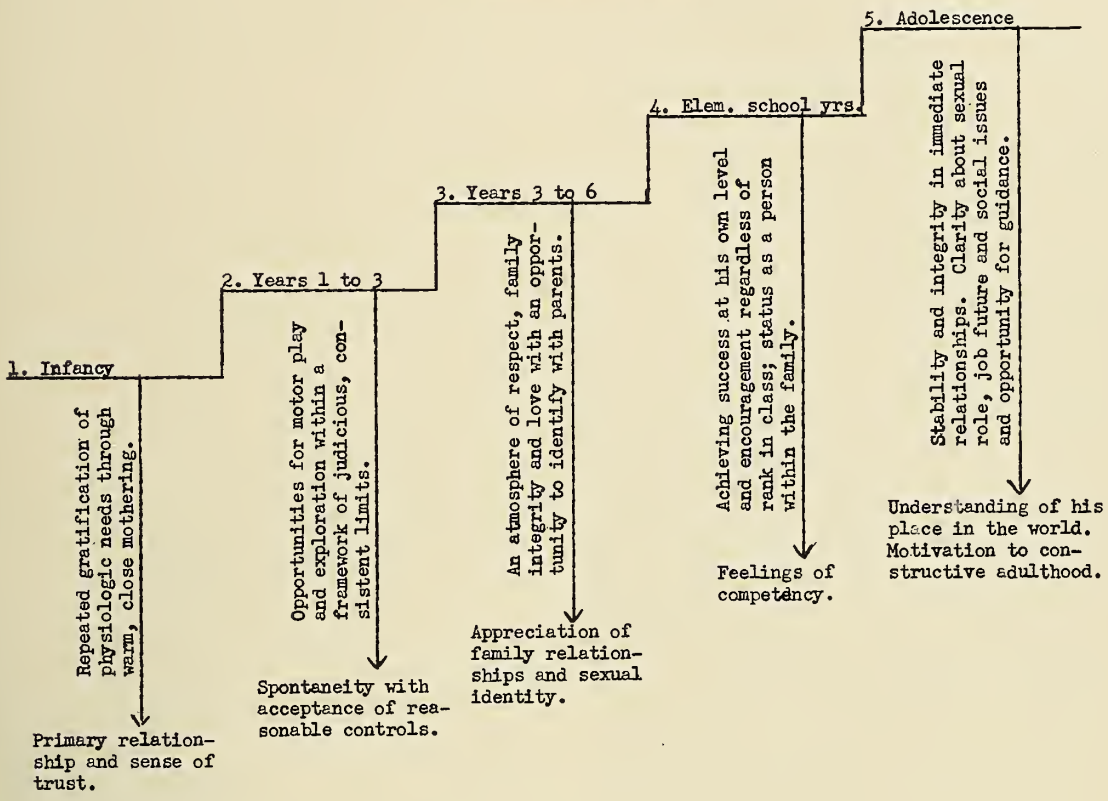
At this point, it might be well to review our present knowledge of personality growth and to consider optimal ways in which children's psychologic needs can best be met within the family. The accompanying chart may prove a convenient point of departure. Psychologic development is summarized from birth to adolescence. The chart indicates approximate age periods, which of course are very flexible, and the major personality characteristic that evolves in each period is indicated. The legends beside the arrows refer to the experiences the child requires to help him develop optimally in each stage. The age divisions are arbitrary but serve as a convenient way of stressing different developmental needs at various age levels.

1. *Infancy.*—Perhaps the most important single area of psychiatric research in the last decade has had to do with the needs of infants and the effects of deprivation in the earliest years. Through the study of infants reared in institutions and deprived

of the opportunity for direct mothering, we have come to recognize that failure to gratify early needs leads to a later affectionless personality characterized by lack of capacity to establish

aware of the mother but only of his own inner tensions. When he is hungry, she feeds him; when he is cold she warms him; when he is lonely she cuddles him. Gradually, he comes to recognize

A CHART OF PERSONALITY DEVELOPMENT



depth relationships, lack of social awareness and frequently severe delinquency because there is no inner restraint to impulses. These are among the most tragic children we see, and while this psychopathic personality entity was once thought to be constitutional in origin, there is ample clinical evidence today to show that it has its roots in the lack of opportunity for establishing a relationship with a mother person in the early years. The condition is all the more tragic then, because it is preventable. Having established this relationship between total deprivation and later psychopathic correlate, workers moved on to the study of specific experiences in infancy that lead to the opposite—warmth and depth of personality. The matrix for these characteristics appears to develop during the first year and has its origin in the primary relationship established by the child with the mother who cares for him. At birth, the infant is not

her touch, the tone of her voice and, after some months of repeated gratification of his physiologic needs and tensions, he establishes a meaningful relationship with her. By the end of the first year, this relationship should be well established; upon this first relationship, the child builds all others; without it, he remains affectionless. Recognizing this, pediatric practice has moved gradually in the direction of facilitating the closeness of infant and mother, and mechanical blocks to this closeness have been removed. Practices to encourage spontaneity on the part of the mother have been developed. For example, our maternity hospitals in increasing number are having mothers participate actively in the care of their infants from the first day on. Many a mother recalls in an earlier day hearing a baby cry in a common nursery down the hall in the hospital, being certain that it was her baby, and unable to go to him, feeling helpless

and often angry. Today with rooming-in, through which the baby is close to the mother from birth on, she can tend to him herself, and by the time they leave the hospital she knows her baby, his particular cry, his feeding habits, what makes him comfortable. Doctors and nurses have helped her develop techniques in handling the baby and have absorbed much of her anxiety. At home, she no longer adheres to a rigid schedule but feeds the baby when he is hungry according to his own rhythms. Following this self-demand feeding method, she finds that before long the baby puts himself on a schedule dictated by his needs and no other baby's. She fondles him without fear of spoiling him, and she gains confidence as the baby responds to her. Her techniques are her own and in their details will vary from mother to mother according to each mother's personality. If a mother feels relaxed and confident, she will communicate her pleasure to the baby, and both will be off to a good start. Whether this period, perhaps the most vital in the life of the child, will be relaxed and comfortable for both mother and baby will depend to a significant degree on the attitude of the doctor, on how he handles anxiety within the family and uses his relationship with the parents to increase their spontaneity and realize their full potentials as parents.

2. *Years One to Three.*—Having established a feeling of trust in his world through his relationship with his mother, the child in the second year and on reaches out to explore the world. He begins to develop a feeling of himself as a person who can perform and accomplish. He wants to feel everything, to push and pull, to experiment with gravity. He is thrilled to find that by a simple turning of his wrist he can create a river of milk on the floor, beautiful music with a spoon and a pan. If his every effort of reaching out is met with prohibition and threat, he will not enjoy his new-found capacities and he will fail to integrate into his personality the kind of spontaneity and sense of adventure with which we hope our children will face life. At the same time, he must learn that there are limits, and controls must now be imposed judiciously and consistently. A major accomplishment of this period is toilet training, and the way a mother handles this is often a reflection of her general attitude.

During this period, the doctor can often observe undue fear on the part of the mother of the child's exploratory efforts, undue demands for control or accomplishment beyond the capacity of the child, over-compulsiveness regarding diet or toilet training or over-permissiveness on the part of a mother unduly fearful of inhibiting the child. No one is in a position like the pediatrician or the family doctor to observe these attitudes and no one can help the mother with them on the spot as effectively. Diagnosing and handling such familial attitudes is the keystone of preventive psychiatry.

Much has been written about specific methods of handling individual aspects of child care in these early years. Actually techniques seem to matter a great deal less than the tone which is communicated to the child. There is no panacea in breast feeding, self-demand feeding, late toilet training or any other single aspect of child care. The gesture counts less than the affect or emotional tone behind the gesture, and it would seem important that we, as physicians, communicate this to our families. There are ample anthropologic data to give scientific credence to such a view. Permissiveness can become as much a ritual as rigidity in child care and it is our job to help families strike a balance and above all preserve their sense of competence and spontaneity as parents.

3. *Years Three to Six.*—Much has been written about sex education for children. In general, we now tend to answer questions frankly as they are raised and encourage children to feel free to bring questions to us. But by far the most important aspect of sex education for children is their living experience within the home. Exposed to an atmosphere of understanding and love between parents and between parents and children and accepted by both parents, a child gradually comes to understand the meaning of family relationships. He recognizes differences in the sexes in this period of years, three to six, and comes to identify himself with his father as a girl identifies herself with her mother. There is no special problem in this process, and sexual awareness and comfort can be integrated by a child as readily as any other aspect of his personality, if the family situation so allows.

As the child evolves sexual consciousness, he can be overstimulated and not infrequently today we find children exposed to too much handling at this period, to too much frank lovemaking on

the part of the parents, and it is often the rôle of the doctor to interpret these situations as he observes them. If he does not, who will?

4. *Elementary School Years.*—By the time children enter school, they begin to view themselves comparatively. They are exposed to group pressure at school and in play, and they wonder how they are measuring up to what is expected. How the child answers this question to himself will determine how competent he feels. Because each child has his own level of capacity and can do only as well as he is able in competition with others, it is important that whatever his level be, inasmuch as possible he will have a feeling of accomplishment and success. If he is exposed to frustration outside the home, then acceptance within the family is all the more important for him. In our culture, we stress so much "Be a success" to our children; it isn't too easy, however, to define success to them. We are coming gradually to recognize individual differences more frankly, to accept children as they are, to rank them less, and to allow them to grow without the shadow of guilt that has engulfed so many in the past.

To interpret limitations in children to their parents is often difficult but very necessary if children are to avoid unnecessary frustration and discouragement. Then, too, many parents expect too much of normal or gifted children and seem never satisfied. Here, again, there is need for interpretation, and the earlier, the better.

5. *Adolescence.*—It is difficult to summarize in a brief paragraph the situation of adolescents today. Reading the papers, we might get the feeling that as a group they have gone to the dogs and are all marauding vandals. This is far from the truth. Delinquency among adolescents does represent a major social problem today, but it is probably not much greater than it has been for many years past, and the majority of adolescents are still law-abiding citizens-to-be whom we can trust and respect. It is important that we bear this in mind, because children tend to live up to what is expected of them, and we must avoid having our adolescents feel that we have lost respect for them. Actually, adolescents, more than any other group, tend to reflect the tensions of the times, and there is no denying the confusion and uncertainty of our world today. Stability in their immediate relationships is essential for our adolescents, and their great need is to understand just where they belong and how they can be most productive. Referring back to our chart, we can postulate that having evolved from infancy, meaningful relationships and a sense of trust, feelings of spontaneity and capacity to accept controls, comfort in sexual identity, and feelings of competence, the adolescent can be expected to move on to new responsibilities and maturity. His world, however, must be as stable as possible, the adults about him as honest and ethical as they can be, and opportunities for guidance about sexual matters, job future and other vital preoccupations made available to him.

Of necessity, this outline of personality development and children's needs has been abbreviated, but in essence it represents the trend of current psychiatric thinking. We hope that implicit in this discussion will be found opportunities for preventive involvement by medical practitioners in their practice of total medicine.

We have omitted reference to serious pathologic conditions. Where it is evident that more intensive care is indicated than the pediatrician or general practitioner can provide, then referral to appropriate psychiatric resource people should follow. Unfortunately, at this time our specialty of child psychiatry cannot meet all the demands for service placed upon it, but we are working toward the development of more personnel and broader services, and our new children's psychiatric hospital now in construction at the University in Ann Arbor within a few years should begin to fill the needs. The job of meeting mental health needs in our state is a tremendous one and will be accomplished only through integration of resources at many levels, with the non-psychiatric physician playing a key role.

In our field, in general, at this point, much more research is needed into such problems as schizophrenia, brain damage in children, reading disabilities in children and many psychosomatic illnesses. A primary need is for longitudinal case studies which will ultimately come from pediatricians and practitioners working together with the child psychiatrist. But this is another chapter beyond the scope of this paper.

Finally, a word on a major dilemma—the problem of teaching psychologic medicine in a medical school. Significant progress is being made in this

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A Training Program for Medical Office Assistants

By Lawrence A. Pratt, M.D.

Detroit, Michigan

DURING the last fifty years, many profound changes have taken place in the practice of medicine, designed to keep it in balance with the changing order. At one time the doctor worked in an atmosphere of relative independence with little or no help from medical service personnel. It was soon recognized, however, that help and teamwork were required in order to make the best and most economical use of the physician's talents and training. With the expansion and development of programs for training nurses, laboratory and x-ray technicians, anesthetists, and administrative personnel, the physician was able to render greater and more efficient service.

As a by-product of this development, the need and demand for a trained medical office assistant grew to the extent that this need was exploited by some private schools in business for profit. Some of these training programs left much to be desired in ethical and educational soundness. The institutions of public education had not developed an educational program which would contain the "package of skills" considered essential by doctors, yet capable of organization to fit a short-term, intensive training program.

With the ever-increasing scope of modern medical service, it is unlikely that the need for well-trained medical service personnel will be met in the immediate future. It is desirable and necessary, therefore, to encourage the recruitment of, and provide adequate training facilities for these members of the medical team.

The idea of developing a training program for medical office assistants by a public educational institution was conceived several years ago. It was felt that an educationally sound course could be developed in a short, intensive twelve-month program by an accredited secondary school or college with the co-operation of the medical society and hospitals in a given community. Further exploration and consultation with individuals in the fields of medicine, education, hospitals, and medical administration indicated that such a program should contain the following basic ingredients:

1. Ten months devoted, on a full-time basis, to training in medical administration, to include medical terminology, filing techniques, telephone-answering techniques, public relations, medical records, and medical ethics.
2. Forty hours devoted to the practical aspects of office nursing, to include such procedures as the draping of patients, sterile techniques, care of instruments, and assistance with patients.
3. Ten weeks of in-hospital laboratory training under the direction of competent pathologists and technicians in the technique of blood counts and urinalysis.

On March 15, 1950, the Advisory Committee of the Michigan State Medical Society to the Department of Public Instruction of the State of Michigan made the following recommendation:

> ". . . that the Superintendent of Public Instruction encourage junior colleges and other recognized and accredited educational institutions to establish and publicize offerings designed to provide training for medical office aides, medical office assistants and medical office secretaries, and that one school be selected to develop a demonstration program in this field."

It was felt that such a program should be developed as a pilot course and that it should be in effect for a period of about three years for proper evaluation.

In September, 1950, Mr. William B. Hawley, Assistant Superintendent of Public Instruction in Charge of Vocational Education, State of Michigan, suggested that Highland Park Junior College consider the establishment of a terminal course of approximately one year in length for the training of medical office assistants. This choice was most fortunate because Highland Park Junior College has high ethical standing in the education world; is the largest and oldest junior college in Michigan; and has been a leader in the promotion and development of work experience and co-operative programs.

In October, 1950, the School District of the City of Highland Park requested the Wayne County Medical Society to determine whether there was a feeling of need on the part of the

This material was compiled by Dr. Lawrence A. Pratt, with the assistance of Dean Grant O. Withey and the staff of Highland Park Junior College, at the request of the Advisory Committee of the Michigan State Medical Society to the Michigan State Medical Assistants Society.

Society for the offering of a training program for medical office assistants in one of the public educational institutions in the Wayne County area. It was the consensus of opinion of the Council of the Wayne County Medical Society that such a need did exist, and on October 26, 1950, the president of the medical society was authorized to appoint an advisory committee to the school district of the City of Highland Park. On November 20, 1950, a meeting was held with representatives of the Highland Park Board of Education, the Department of Public Instruction of the State of Michigan, and the Wayne County Medical Society. After considerable discussion, the following general conclusions were reached:

1. That a one-year terminal course could be devised to provide training for medical office assistants in a junior college.

2. That the trained medical office assistant would be a combination office administrator and practical office nurse, with technical training in two basic laboratory procedures, i.e., blood counts and urinalysis.

3. That the course would include hospital training in practical office nursing under the direction of a registered nurse, and in-hospital training in the laboratory procedures under the direction of pathologists and laboratory technicians.

4. That the course would be open to better than average high school graduates presenting a pleasing appearance and exhibiting personality traits appropriate to a doctor's office.

5. That the school personnel, under the direction of Dean Grant O. Withey, would undertake the development of a proposed course outline after consultation with the doctors on the committee, Highland Park General Hospital and other institutions.

It was felt that the Division of Vocational Education could help in supporting the cost of this program because of its experimental nature.

Even though it was apparent that such an experimental program would have to be operated at a financial loss, the Highland Park Junior College was willing to go along with the idea for the following reasons:

1. An educational philosophy which includes the idea that a junior college should develop programs designed to meet the vocational and general needs of students preparing to enter directly from the college into civic life and technical and business occupations of the community.

2. The firm conviction that a junior college curriculum should be geared to the needs and capacities of its students.

3. Unwillingness to accept the notion that job-training programs are primarily for marginal students.

4. An understanding that the impatience of youth to assume an independent and adult role in society is a very real reason for the development of short-term training courses.

5. Appreciation of the real need involved and its probable relation to the vocational aspirations of students.

Further extensive conference sessions were required to define the elements of the program and organize the specifics of instructional methods and materials.

Dr. Osborne A. Brines, Professor of Pathology of the Wayne University College of Medicine, discussed the plan with a representative group of pathologists in the Detroit area. This group was agreeable to the proposed plan and indicated its willingness to assist in its development and application.

The Department of Nursing of the Highland Park General Hospital felt that it could be of assistance in the training program as it related to the practical aspects of office nursing. The Department was willing to make class-room facilities available for that part of the teaching program.

Eventually, there was basic agreement concerning the type and content of the course. In May, 1951, on recommendation of its Medical Advisory Committee, the Council of the Wayne County Medical Society gave its official approval to the pilot study inaugurated at Highland Park Junior College for the training of medical office assistants. Recruitment of students was started in the spring of 1951 for the first class, which was to begin in September, 1951. Accordingly, the program was announced by distribution of appropriate literature and notices through certain local media.

While considering that such a program could conflict with recruitment efforts for other medical service personnel, such as nurses and laboratory technicians, it was felt that the program would

eventually aid rather than hinder the other recruitment programs. It seemed desirable to offer a program which would bring interested and high caliber students into the field of medical service on a short-term basis. While the primary purpose of the program is the training of medical office assistants, it was anticipated that some of the students would proceed with one of the more extended courses designed for the training of medical service personnel.

The members of the first class were carefully selected on the basis of aptitude, ability, personality and interest. The training program was started in September, 1951.

Certain modifications were made from time to time on the basis of experience, periodic evaluation, and further conferences and discussions. No serious problems were encountered until January, 1952, when The Detroit Society of Medical Technologists took a stand against the program because of the inclusion of some laboratory training. Eventually, it was necessary to arrange for the laboratory portion of the training program to be conducted in hospital laboratories which did not have training courses in medical technology. Dr. S. E. Gould, Chairman of the Committee on Pathology of the Wayne County Medical Society, was able to arrange for the placement of the students in the laboratories of several hospitals in the Detroit area during the months of June, July and August of 1952. The pathologists and laboratory technicians were most co-operative in this undertaking. The evaluation studies soon indicated that the student could be an asset rather than a liability in the hospital laboratory. In addition, there was some feeling on the part of the technicians that the students trained under this program could eventually release some of the trained technicians from doctors' offices for their much-needed services in hospital and clinical laboratories. This attitude on the part of the medical technicians was most welcome and encouraging.

At this time, it was felt that the original concept of a three-year period as a requirement for evaluation of the program was realistic. After further conference and discussion, it was decided, in the spring of 1952, to undertake recruitment for the September class. On January 16, 1953, the Council of the Wayne County Medical Society reaffirmed its endorsement of the program, and the Committee on Pathology gave its assurance that it would continue to co-operate in the program by placing the students in one of the various hospitals in the Greater Detroit area for completion of the laboratory training portion of the program. The third class was started in September, 1953.

After graduation of the first and second classes, it became apparent that the demand for the trained office assistant would far exceed the supply. As part of the evaluation program, it has been possible to determine the reaction of both the trainee and her employer. Extensive evaluation studies have been carried out under the direction of Department Head Miss Norma Sammet, who assumed major responsibilities in integrating and co-ordinating the various training areas of the program.

Three approaches were used. First, study and evaluation were made of time allocations given to various segments of the integrated curriculum. Was there over-emphasis in some areas, or too little emphasis in others? Conclusions were based on conferences with student groups during classroom training periods. The second approach involved the careful integration of college classwork in laboratory techniques with the off-campus program in laboratory apprenticeship. These involved a number of individual, differently organized laboratories and a number of pathologists and technicians. Personal visits to work stations were necessary before valid conclusions could be reached and workable procedures developed. The final approach was directed at individual on-the-job performance. This was developed through use of questionnaires, which enabled the employing medical practitioner to evaluate a course graduate in personal competency and suitability of preparation. On the basis of these studies, the following conclusions were reached:

1. That the training processes are adequate. Medical practitioners who have employed graduates are unanimous in expressing approval and satisfaction.

2. That classroom instruction in laboratory procedures is more than adequate for entry into the summer laboratory apprenticeship.

3. That the scope of the laboratory work taught in the college classes and the nature of the training given during the summer apprenticeship clearly indicate that the Highland Park Junior College

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St. Luke's Hospital Clinico-Pathologic Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan

Clinical Record

The patient was a white male infant, five weeks old, who was well until the tenth day of life. At that time, projectile vomiting of all feedings began. The vomitus was green and non-viscid. This persisted for approximately two days after which the vomiting stopped and normal development proceeded. The infant was then well until four days before admission to the hospital. At that time, the mother noted increasing irritability followed by screaming suggestive of intense abdominal pain. Vomiting of all feedings recurred. The patient then entered St. Luke's Hospital.

The pregnancy preceding birth of the infant had been normal. Delivery was spontaneous and uneventful and the postpartum period was not remarkable. The mother and baby left the hospital on the fourth day after delivery. The birth weight was 7 pounds, 4 ounces.

Physical examination revealed a well developed and somewhat dehydrated, acutely ill, white male infant. The weight was 6 pounds, 8 ounces. The temperature was 98 degrees (F.), pulse 130, and respirations 24. The head was of normal contour, and the fontanelles were soft and flat. The eyes, ears, nose, mouth, and throat were not remarkable. The neck was supple and lymph node enlargement was not detected. The chest was symmetrical and clear to auscultation. The heart was not enlarged, the rhythm was regular, and there were no murmurs. The abdomen was soft and slightly distended. The liver, spleen, kidneys, and urinary bladder were not palpable. A pyloric tumor was not detected. Normally active peristalsis was audible in all quadrants. Peristaltic waves were not visible. The external genitalia were normal and the testes were in the scrotum. There were no herniae. The anus was perforate, and the extremities were symmetrical and thin.

The urine was yellow, cloudy, alkaline and of specific gravity 1.007. There were no protein, ketone bodies, or reducing substances. The sediment revealed oxalate crystals, one to three leukocytes, and one to three epithelial cells per high power field. Hematologic examination revealed 14.4 grams of hemoglobin per 100 cc. There were 4,600,000 erythrocytes and 8,000 leukocytes per cu. mm. Differential count of 100 cells revealed 70 lymphocytes, 25 segmented granulocytes, 4 band cells, and 1 eosinophil. Stool culture revealed Proteus vulgaris and non-pathogenic coliform bacilli. On the day after admission, x-ray examination of the abdomen disclosed moderate dilatation of the stomach, a normal pattern of intestinal gas, and no abnormal shadows. Barium studies then revealed an obstruction of the duodenum estimated to be just proximal to the Ligament of Treitz. The obstruction was observed to persist over a period of six hours.

On the fifth hospital day, the abdomen was opened. The cecum was found to lie in the right upper quadrant and to be mobile so that it could be nearly placed in its normal position. The duodenum was found to occupy a somewhat intraperitoneal position with some redundancy. A fibrous band extended from the transverse colon to the root of the mesentary that compressed the third portion of the duodenum. The lumen was dilated proximally and collapsed distally. This band was cut and the abdomen was closed.

After operation the patient retained feedings, gained weight, produced normal stools, and appeared well for the ensuing eleven days. At that time, vomiting recurred. Repeat Barium studies revealed the descending portion of the duodenum to deviate to the right in an inferior direction. There was no obstruction to Barium in the entire gastrointestinal tract. Pronounced vomiting of four to five days duration alternated with periods of food retention and normal stools. Vomiting progressed and death occurred after 40 days in the hospital.

Clinical Discussion

Dr. C. W. Cory: There are several data in the clinical record that warrant emphasis. This baby was well for the first ten days of life. There was then a two-day period during which all feedings were vomited in a projectile manner and the vomitus was green. From this we may be reasonably certain that the site of obstruction is distal to the ampulla of Vater and that the vomiting is not due to a completely obstructive congenital anomaly. The infant now spontaneously stops vomiting and proceeds in normal health for a period of nineteen days, after which the vomiting recurs and is accompanied by intense abdominal pain. The patient is admited to the hospital. We have so far from this history evidence suggesting recurrent obstruction of the small intestine at some point distal to the ampulla of Vater.

The physical examination revealed a soft and slightly distended abdomen. Peristaltic movements were normally active and a pyloric tumor was not palpated. The laboratory studies were not revealing and x-rays disclosed moderate dilatation of the stomach and partial obstruction of the duodenum estimated to be just proximal to the ligament of Treitz. We now know the site of the recurrent obstruction. Exploration should reveal the type of lesion. However, operation disclosed proximal dilatation and distal collapse on either side of a fibrous band that passed anteriorally over the third portion of the duodenum. It was assumed that this band was the cause of the obstruction and the band was cut. It was also noted that the cecum was in the upper quadrant of the abdomen on the right. After operation, all went well; feedings were taken normally and stools were passed regularly.

On the twelfth postoperative day the vomiting suddenly recurred, and it became evident that some lesion in addition to the band was causing obstruction. Barium studies were repeated and now we find downward displacement and right deviation of the descending limb of the duodenum. In addition, some Barium passed into the distal small intestine signifying the incomplete nature of the obstruction. Thereafter, vomiting alternated with periods of food retention and the infant died five days later. In summary, we have recurrent partial obstruction in the region of the duodenum associated with displacement of the proximal limb, a fibrous band passing over the third portion, and abnormal mobility of the cecum in an infant five weeks old.

Several conditions must be considered in the differential diagnosis of recurrent vomiting in infants. Pyloric stenosis is clearly excluded, as in that condition, the onset occurs during the first week of life, the vomiting is persistent, the vomitus does not contain bile,



Fig. 1. Gross specimen showing wide mesentery of colon and free coils of ileum. The mesenteric root is adjacent to the site of emergence of the colon.

a button-like tumor is palpable in the mid-epigastrium, and peristaltic waves are often visible through the thin abdominal wall. Pylorospasm responds to sedation and is not associated with structural abnormalities such as we have identified here. Habitual vomiting in infants is characterized by persistent "spitting up" of small amounts of feedings and there is no sudden, violent, and recurrent vomiting. Intussusception is manifested by severe and often recurrent abdominal pain of sudden onset. However, the onset is usually somewhat later in life, duodenal and cecal displacement are not associated findings, and melena is a conspicuous sign. In addition, intussusception in the child is usually ileocecal, and although reduction may be spontaneous, this portion of the bowel was of normal appearance at the time of operation. Having discarded these conditions, I believe we should focus our attention on the congenital anomalies that might give rise to these clinical disturbances. Segmental aplasia of the duodenum may of course be excluded as we know the obstruction is partial and recurrent. Some form of duodenal anomaly associated with intestinal malrotation is strongly suggested by the mobile cecum, the duodenal displacement, and the congenital fibrous band. The latter is known to frequently accompany anomalies of intestinal rotation. A second congenital fibrous band is unlikely because of the recurrent nature of the obstruction. Complete volvulus is unlikely because in that case the course is short, rapidly progressive, and not recurrent.

We are now left with two anomalies that are exceedingly difficult to distinguish from clinical study. The first is a defect of the mesentery with recurrent herniation of a loop of small intestine through this hiatus. The second is incomplete posterior attachment of the mesentery so that the small intestine hangs free in the peritoneal sac from a restricted attachment at the point of emergence of the superior mesenteric artery. Peristaltic motility leads to torsion of this narrow base with compression of vessels at the mesenteric root. Both of these conditions are reflected clinically by sudden obstruction of the intestine that spontaneously subsides and is intermittent. In the case of mesenteric root defect, there is no need to also postulate a loose posterior attachment of the whole mesentery, and this would be a silent and incidental finding. However, in the case of torsion of the mesenteric root, a loose or absent posterior attachment is a necessary part of the anomaly. Therefore, the latter appears much more likely as we know from the operation that the cecum was displaced to the right upper quadrant, implying a defective mesenteric attachment to the posterior wall. Thus, I shall make the diagnosis of incomplete mesenteric attachment of the small intestine with torsion of the mesenteric root and recurrent volvulus.

Dr. Cory's Diagnosis

Recurrent volvulus of small intestine.

Anatomic Diagnoses

Incomplete attachment of mesentery with recurrent volvulus of small intestine.

Dr. J. C. Smith: Autopsy examination revealed a central smooth oval mass of coiled ileum suspended in the abdomen from a circumscribed mesenteric root that measured 1 cm. in diameter (Fig. 1). The first portion of the duodenum was retroperitoneal. The duodenum emerged from the retroperitoneal position at the mid-portion of the transverse segment and entered the central mass through the narrow base. The mesenteric vessels traversed the narrow root and were of course subject to compression as peristaltic activity twisted the point of attachment. The large intestine was also abnormally mobile as the mesentery was wide and unattached to the posterior abdominal wall. Focal pulmonary atelectasis was the only other significant finding.

Embryologically, the mid-gut forms in three phases. The first, lasting until the 10th week of intra-uterine life includes extrusion of the small intestine and colon into the umbilical cord where elongation takes place. The second, lasting but a short time, includes the return of the ileum into the peritoneum where it passes behind the root of the mesenteric artery and fills the left side of the abdomen. Pressure of the entering ileum on the left forces the colon to the right so that the cecum lies in the lower quadrant and the transverse colon is in an anterior position. The third phase lasts until birth when the small intestine becomes attached to the posterior body wall along a line extending from the ligament of Treitz to the cecum. In this case, the first two phases were normal. The last phase was incomplete leaving the entire small intestine hanging from a restricted mesenteric attachment about the origin of the superior mesenteric artery. Abnormal development of the first phase leaves an umbilical hernia, of the second phase, some degree of intestinal malrotation, and of the third phase, incomplete attachment, often with partial or complete volvulus.

Reference

1. McIntosh, R., and Donovan, E. J.: Disturbances of rotation of the intestinal tract. Clinical picture based on observations in twenty cases. Am. J. Dis. Child., 57:116, 1939.

The Michigan Health Council

How many of you reading this page know what the Michigan Health Council is and what it does? The Michigan Health Council was organized with the support of the Michigan State Medical Society just before our country became involved in World War II.

The basic reason for its formation was to organize community health councils. There are at present forty-four of these scattered throughout the state. The membership of a community health council is composed of citizens, both lay men and women and doctors of medicine, who are interested in raising the health standards of their community through such projects as sanitation improvements and physical examinations for school children. In furthering such activities Michigan Health Council representatives are invited by a community to work with the local citizens and furnish the know-how for the formation of a local health council.

In January of last year, The Council of the Michigan State Medical Society asked the Michigan Health Council to take over its M.D. Placement Program. Up to July first of this year, the Health Council had been instrumental in the very worthwhile project of placing forty-seven doctors in areas where they were needed in the state. The success of this program is attested to by the fact that it has received recognition and study by the American Medical Association.

The Michigan Health Council has for over two years written and staged a live broadcast over station WJBK-TV in Detroit with a minimum of 30,000 to 40,000 receivers. It publishes a Monthly Bulletin, a health organization directory and several brochures of value in the organization and execution of projects by community health councils. The Council also aids in recruitment in the Medical Associates field and manages the annual Michigan Rural Health Conference, the latter having become extremely valuable in bringing health consciousness to the people of the small towns and rural districts of our state. They have been well attended.

The Michigan Health Council is a very worthwhile organization and its staff merits the thanks of the members of our profession for their industry and good work.

L. W. Hull

President, Michigan State Medical Society

President's



Message

Editorial

SELF EMPLOYED DESERVE CONSIDERATION

THE MEMBERS of the National House of Representatives and one-third of the Senate will be up for re-election this coming November. Most of our members know some of these candidates fairly well, or should. An election campaign is a good time to explain to them what we citizens want done when they get to Congress. Every doctor of medicine should be interested in the proposal we have made many times. We ask a simple change in the income tax laws, a simple "even break" with salaried and business executives.

Industry builds up retirement programs for its executives and salaried personnel by investing in annuities or insurance for the employes, using a stipulated percentage of salary for retirement benefits and charging the whole expense to costs of business. This has been done for many years and is perfectly legitimate. But, can the self-employed, professional man do the same? To set up a retirement schedule for its men, industry is building tax-free funds to make the payments. The salaried beneficiary and his employe is excused from the high income tax bracket until he is receiving his benefits.

A number of bills have been introduced into the Congress over the years to accomplish this purpose for self-employed persons. They have been known by various names, Reed-Keough-Jenkins. We believe these bills are just. They are offering to the profession only the same advantage now given to our friends in business.

We have recently seen a new argument and a convincing one for the passage of the Jenkins-Keough bills. At the annual meeting of shareholders in the American Telephone and Telegraph Company, some shareholders raised the question of the propriety of the company's providing such generous retirement programs for the executive personnel. Mr. Elihu Root, Jr., replied for the directors:

In past years, we have advanced many arguments as to why we should ask our Congressmen to give us a chance to lay up a retirement income during our comparatively short years of maximum earnings, especially when the taxes as now levied scarcely allow a doctor, or other self-employed, professional person to save much for the days of lessened income but established and fixed obligations.

"Salaries are not as large as in many companies that compete with us for talent. They are fair, but moderate. They are well below the leaders.

"On the other hand, the company's pensions are on a level with the leaders—not in advance of other companies, but well up in the van. On that, your directors principally rely in attracting and keeping talent.

"Why do we rely on pensions rather than on salary? It is very simple. If you try to increase the inducements to good men by paying an extra dollar to an executive in the high-salaried bracket, Uncle Sam takes 90 cents away in income tax; and if he invests the remaining 10 cents, Uncle Sam takes nine-tenths of the income on that. But if you put that dollar in a pension trust, the whole dollar goes in tax-free until the executive retires. So the pension dollar, as opposed to the salary dollar, has an advantage—from your point of view in getting good executive talent—of from ten to twenty to one. It is the most economical way to do it."

During the time before elections in November, we again urge our readers to talk with their U. S. Senators and Congressmen. Tell them what we want. When Congress learns that we know what we want, that we have just reasons for those wants, and are not hesitant to ask for them, we may look for action.

SOCIAL SECURITY

THIS EDITORIAL is being prepared while Congress is still arguing about the amendments to the Social Security acts. The House has exempted the medical profession only from the all-inclusive Social Security coverage The Senate Finance Committee recommends exemption of physicians, dentists and other self-employed groups. Final action is still in the future, but will probably exempt Doctors of Medicine.

The suggestion has been made that the word "compulsory" be eliminated, and that those who wish be allowed to join the group voluntarily. We contend that Congress should amend the proposal so that those who wish may collect their benefits when they become eligible for them at age sixty-five. The restriction limiting recipients to $75.00 a month of covered earnings, else they lose their rights, should be completely eliminated. These oldsters who keep on working will still be paying their tax.

To include the medical personnel under present restrictions would be taxation with only partial benefit. Very few doctors retire at sixty-five, hence they could not benefit from the proposed retirement benefit until age seventy-five.

Another controversial part of this amendment is Section 106 of H.R. 9366. This is the provision for continuation of benefits for the laborer who is disabled to the extent that he cannot work and keep his payments going into the treasury in a maximum amount so his retirement benefits will not be reduced. A medical examination scheme is set up under the Secretary of Health, Education and Welfare by which the medical profession would have the burden of making many examinations, under bureaucratic supervision. That is the feature to which the American medical profession objects. Such a provision is completely unnecessary. The law could stipulate that when a disabled person begins to draw his benefits, they could be determined on the best six or seven years earnings of the last ten or more before retirement.

We believe the bill could easily be made completely satisfactory in regard to Section 106.

THE PRESIDENT'S HEALTH PROGRAM

IN JANUARY, the President outlined to Congress his analysis of the State of the Nation and his suggestions for a National Health program. He went into minute detail, classifying his desires and ambitions. The Congress is about through for the year, and a summary is in order.

The President did not do so badly in his accomplishments. He has succeeded in adding seven or ten million persons to the Social Security lists. He wanted the medical profession included but we succeeded in changing that in the bill already passed by the House of Representatives. The final law is likely to correspond to that action. The President lost out in only a very small part of his bill. The medical profession will still be an objective.

The Reinsurance Bill has been sent back to committee, which probably kills it for this session of Congress. The bill, as presented, was unnecessary. There are segments of the population who might have been helped by some sort of measure doing what the promotors of the legislation claimed for the bill. Actually, the bill offered nothing which the plans cannot do and are not doing by themselves. As written, the plan was not a real reinsurance.

The Congress has adopted an extensive expansion of the Hill Burton hospital building law by providing grants to centers, chronic disease hospitals, nursing homes. Vocational rehabilitation has been about doubled in its scope and facilities. The Doctor Draft Law has been enacted. Tax reductions for medical expenses have been materially liberalized: deductions for expenses over 3 per cent instead of 5 per cent as now; maximum deduction for single persons doubled to $2,500; joint returns maximum $5,000, over all $10,000. There are several other benefits. Indian hospitals have been transferred to the Public Health Service.

In our opinion, the President has made a very favorable batting average. He has our congratulations!

ROSTER SUPPLEMENT

The roster supplement was planned to accompany the September number of THE JOURNAL, but due to the late arrival of some of the rosters, and the desire to have this number of THE JOURNAL arrive on the readers' desks before the date of the annual meeting, we have held up the supplement until the October number. This will give us a chance to make it more up to date, and give the September number a few days headway on the presses.

CHILD PSYCHIATRY IN PEDIATRIC AND GENERAL PRACTICE

(Continued from Page 1025)

area, but we have a long way to go. At this point, it is difficult to discuss family problems and ways of handling them with students who have had no contact as practitioners with families. It is difficult and sometimes frightening for the student to project into the future. How easy it would be for us teachers of psychiatry, if our students had some years of experience in practice to serve as a focus for group discussion. There is probably a greater need for postgraduate seminar teaching in the field and there is a promise of more of this for the future.

Margaret Mead, the anthropologist, tells us that "we as a people, parents, teachers, citizens are rearing unknown children for an unknown world." Through continuing study of the inner life of children, we can hope to broaden the horizon of our knowledge. And through sharing of our varied experiences and insights and applying what we know in our practice of total medicine, we, as physicians, can do much, we feel, to make children better known to their parents.

School Health Policies

The School Health Problems Subcommittee, a new adjunct to the MSMS Child Welfare Committee in 1953, has attempted to define the position of the doctor of medicine in relation to children and their school life. The subcommittee—of which W. J. Morrow, M.D., of Ludington, is chairman—recognizes the need for close parent, teacher and doctor co-operation in making the child's school life abundant and meaningful. It also feels that doctors need greater awareness of the challenges and problems that exist in this field.

There is much work to do. Presented below are principles developed as the foundation for school health policies acceptable to the medical profession in Michigan. These principles need discussion and dissemination. They will need revision in the light of local circumstances, and amplification to fit individual problems.

They are presented as a "taking off place" for future development.

I. School health policies must represent the viewpoint of parents, educators, practicing physicians, and public health workers.

II. School health policies must cover several areas, including (1) health education and instruction, (2) environmental sanitation and healthy school living, and (3) health services and health protection and improvement.

III. In establishing any policies for school health services or health protection and improvement, it must be recognized that the health of the school-age child *is basically the responsibility of the parent or guardian.* The following standards are suggested as adequate from the practical viewpoint and not necessarily the ideal:

A. Physical examination should largely be done by the family physician.

(1) Routine complete physical examination of the total child should be made immediately prior to his entry into kindergarten, and during his first year of junior high school (seventh grade). The examination should be made in the office of a doctor of medicine. The preceding is a recommended minimum. The optimum would include complete physical examinations in the second or third grade, plus another in the eleventh or twelfth grade.

(2) Referral examinations should be made at any time the health of a child is questioned by the observation of a teacher or school nurse. The referral should be made by the teacher or nurse to the parent, not directly to a doctor of medicine. Following such a referral examination, the teacher or nurse should be informed through the parent, or by the doctor, with the consent of the parent, that the child is under medical care.

B. Control and prevention of communicable disease.

(1) Immunization policies should be established according to standards already stated and approved by MSMS.

(2) If the teacher's observation suggests the presence of a communicable disease, the parent should be called immediately and the child should be referred to the school nurse, if one is available. To prevent the spread of communicable diseases, the child should be kept apart from his schoolmates and every effort should be made where a common transport is used, as with consolidated school buses, to have the child taken home in a separate conveyance.

(3) Tuberclulin testing should be carried out periodically through grade and high schools, particularly at the time of the routine complete physical examination, and x-rays taken of positive reactors. Mass tuberculin survey is a recommended procedure to be carried out according to community desires.

C. Screening programs.

(1) Screening tests for hearing defects with the audiometer should be conducted routinely every three years. The recommended optimum would include a statement that the child with a discovered hearing defect be checked yearly (preferably by an otologist), and in the case of surgical or medical treatment, should be

(Continued on Page 1058)

Elmer W. Schnoor, M.D.

Of Whom We Are Proud

It may seem a long step from boyhood in Grand Island, Nebraska, to the presidency of the Federation of State Medical Boards of the United States, but it isn't when leadership and devotion are natural attributes as they are in Elmer W. Schnoor, M.D., of Grand Rapids.

In his lifetime—which began on February 21, 1889, in Grand Island—Dr. Schnoor has become recognized as a leader in his profession and has been honored many times for his personal contributions to medicine in his community, state, and the entire United States. With all this, he has found time to take part in civic achievements, and earn considerable reputation as sympathetic advisor and "father confessor" to a large group of patients and friends.



"He's quite a guy," as one member of his office staff puts it.

Those who know him attest that the burden of a busy practice is never too heavy to keep him from helping to solve personal problems far removed from the actual practice of medicine. His close associates recall with a smile one particular instance where a patient with quarrelsome in-laws laid his problem before Dr. Schnoor—who promptly came up with the advice which was needed to bring forth a happy solution.

But it is devotion to medicine and high standards of practice to which Dr. Schnoor is dedicated. The influence of his mother and his own interest and enthusiasm turned his thoughts toward medicine early in life.

Graduating as salutatorian of the class of 1907 in Grand Island High School, Dr. Schnoor entered Northwestern University Medical School at the age of seventeen. With his high school record, he was more than qualified, having six more entrance points than the fifteen required.

Receiving his M.D. degree from Northwestern University on June 14, 1911, he served his internship at Michael Reese Hospital in Chicago. The fact that he ranked No. 1 among the applicants writing the Illinois State Board examination that year foretold what could be expected of Elmer Schnoor in the future. During this period in Chicago, several physicians from Grand Rapids became acquainted with Dr. Schnoor and induced him to come to that city to practice, with special emphasis on surgery. In early 1914, he moved to Michigan and was licensed by the Michigan State Board of Registration in Medicine of which he was to become president. It was in 1916 that he started the first survey of thyroids in Michigan, an interest which has continued for many years. He has operated in approximately 900 thyroid cases in Grand Rapids, and was outstanding in the iodized salt movement in Michigan which is credited with helping to reduce the incidence of goiter to a minimum. Dr. Schnoor was among the early members of the American Goiter Association in 1925, and as one of the leaders in this specialized field, he attended the International Goiter Meeting in Switzerland in 1927.

His practice, however, was in many fields. In 1921, Dr. Schnoor diagnosed the first case of lethargic encephalitis in the Grand Rapids area, and later, in 1922, the first case of brucellosis.

To the citizens of Grand Rapids, Dr. Schnoor is best known for his forty years as school physician and surgeon for the City of Grand Rapids, but his other activities in medical affairs are numerous. He is a past president of the Kent County Medical Society, very active in Society affairs, and an advisory member of the Sunshine Sanatorium staff. At present, he is senior surgeon at Butterworth Hospital and has served as vice chief of staff there.

He also practices surgery at St. Mary's and Blodgett Memorial Hospital in Grand Rapids.

Loyal to his alma mater, Dr. Schnoor served as president of the Northwestern University Alumni Association in 1938-1942, and in 1941 he received the Merit Award from Northwestern University in recognition of his outstanding services and achievements.

The Lions Club in Grand Rapids is another of his interests, and he is the only thirty-five-year charter monarch there. As a Mason, he is a member of the Consistory and Shrine.

Nationally, Dr. Schnoor is best known for his work with medical education and standards through his relationship with the Michigan State Board of Registration in Medicine. First appointed to that body in 1935, he has been president since 1940. The most recent recognition in this field came in February, 1954, when he was elected President of the Federation of State Medical Boards.

With all his responsibilities and achievements, Dr. Schnoor actually has had very little time for relaxation over the years. He has had little opportunity to enjoy his only diversion, an occasional fishing trip. He and Mrs. Schnoor enjoy an evening of cards now and then and he is especially fond of the game of "Bolivia," at which he is an expert, his friends aver. If he reads anything other than medical journals, it is usually a book on politics or economics.

The pride with which his colleagues in the medical profession of Michigan hold him was evidenced last March at the Michigan Clinical Institute when MSMS paid tribute to Elmer Schnoor with a scroll which he now cherishes.

Yes, Elmer Schnoor, M.D., is "quite a guy." Congratulations to you, Dr. Schnoor, on your past achievements and every success in your future endeavors!

A TRAINING PROGRAM FOR MEDICAL OFFICE ASSISTANTS

(Continued from Page 1028)

does not intend that the graduates of the course be mislabeled "laboratory technicians" or that its short "training package" be confused with the more advanced study required of graduate medical technicians.

4. That the laboratory work offered, while not equal to that of the regular medical technician, is adequate for the laboratory needs of the average doctor's office.

5. That course division into three major areas of preparation, Office Procedures, Nursing Arts, and Laboratory Techniques, is justified by the experiences of employed graduates who return questionnaires stating that they have had immediate and recurring need for the training received in all categories.

6. That the inclusion of training for personality develpoment after pre-enrollment screening is justified by the fact that 60 per cent of the graduates have been rated "superior" in personality traits by their employers, and none as "below average."

7. That course content and integration have been stabilized so that further extensive experimentation is not presently needed.

8. That the salaries paid to graduates very well express the value of their services to the doctors who employ them. Salaries are consistently higher than those paid to other secretarial personnel.

This analysis was most encouraging to all those interested in the development of the project. In the light of experience with this program and the critical evaluation to date, the following conclusions seem justified:

1. There is widespread interest and need for a balanced program for the training of medical office assistants.

2. The program, as conceived and developed, is a practical and acceptable method of training this type of medical service personnel.

3. The extension of such programs will help meet the need for trained office assistants and will aid in the recruitment programs for other medical service personnel.

The documentation of the curriculum content for the course has been prepared by the Highland Park Junior College, Highland Park, Michigan. This material is available on request for the use of accredited public educational institutions.

3919 John R. Street

Dramamine's® Effect in Vertigo

Dramamine has become accepted in the control of a variety of clinical conditions characterized by vertigo and is recognized as a standard for the management of motion sickness.

Vertigo, according to Swartout, is primarily due* to a disturbance of those organs of the body that are responsible for body balance. When the posture of the head is changed, the gelatinous substance in the semi-circular canals begins to flow. This flow initiates neural impulses which are transmitted to the vestibular nuclei. From this point impulses are sent to different parts of the body to cause the symptom complex of vertigo.

Some impulses reach the eye muscles and cause nystagmus; some reach the cerebellum and skeletal muscles and righting of the head results; others activate the emetic center to result in nausea, while still others reach the cerebrum making the person aware of his disturbed equilibrium. *Vertigo may be caused by a disease or abnormal stimuli of any of these tissues involved in the transmission of the vertigo impulse, including the cerebellum and the end organs.*

A possible explanation of Dramamine's action is that it depresses the overstimulated labyrinthine structure of the inner ear. Depression, therefore, takes place at the point at which these impulses, causing vertigo, nausea and similar disturbances, originate. Some investigators have suggested that Dramamine may have an additional sedative effect on the central nervous system.

Repeated clinical studies have established Dramamine as valuable in the control of the symptoms of Ménière's syndrome, the nausea and vomiting of pregnancy, radiation sickness, hypertension vertigo, the vertigo of fenestration procedures, labyrinthitis and vestibular dysfunction associated with antibiotic therapy, as well as in motion sickness.

Any of these conditions in which Dramamine is effective may be classed as "disease or abnormal stimuli"* of the tissues including the end organs (gastrointestinal tract, eyes) and their nerve pathways to the labyrinth.

Dramamine (brand of dimenhydrinate) is supplied in tablets of 50 mg. and liquid (12.5 mg. in each 4 cc.). It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.



The site of Dramamine's action is probably in the labyrinthine structure.

*Swartout, R., III, and Gunther, K.: "Dizziness:" Vertigo and Syncope, GP *8*:35 (Nov.) 1953.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

EXPANDED TUBERCULOSIS CONTROL PROGRAM UNDER WAY

New projects in tuberculosis control made possible by the Legislature's special appropriation of $127,000 to the Michigan Department of Health are already in operation and more are in the planning stage.

Since it was decided that approximately one-half of the $127,000 would be allocated for special tuberculosis control projects in local health departments, interest in both local and state health departments has centered upon the planning and choosing of these projects. Eleven proposed by the local health departments have been approved to date.

In Oakland County, part of the salary of a tuberculosis controller will be paid from the special appropriation.

In Detroit there will be expanded follow-up activities of previously known active tuberculosis cases not presently under treatment or control. There will also be expansion of contact examinations for more effective case finding. This is the largest single grant, $19,395.

Two projects, one in Wayne County and one in Grand Rapids, center upon expanding local screening facilities by establishing and operating x-ray clinics. The department will assist in the employment of x-ray technicians and, in Wayne county, a clerical assistant.

In three district health departments, Grand Traverse-Leelanau-Benzie, Delta-Menominee and Dickinson-Iron, grants will be made toward the employment of project co-ordinators for community-wide chest x-ray surveys. The co-ordinators will work on effective ways of promoting x-ray programs through community education and participation.

In Macomb County, a medical-social worker will be added to the staff of the local health department to study new approaches to the handling of treatment and follow-up problems of patients.

To determine the effectiveness of wider use of the tuberculin test as an epidemiologic tool in tuberculosis case finding, three projects will be carried on in the field of tuberculin testing as a supplement to x-ray screening in community case-finding surveys. These projects will be in Van Buren, Eaton and St. Joseph counties. Special study will be made of the case-finding effectiveness of follow-up of contacts of positive reactors.

A records management project will be carried on in the Delta-Menominee District Health Department.

A project which will be of help to practicing physicians as well as to state and local health departments in providing effective epidemiologic control of tuberculosis is the central register which has been set up in the Division of Tuberculosis and Adult Health. This will not only furnish an accurate record of the status of all known cases of tuberculosis at a given time but it will also make possible the continuing supervision of cases and contacts from diagnosis to final disposition.

A long-felt need for some way of doing x-ray screening where no electric power is readily available will be met by the installation of mobile generators in two of the department's x-ray trucks. This will facilitate work with migratory workers.

A pilot study is being undertaken by the Division of Tuberculosis and Adult Health in the medical-social field. A social worker has been added who will study possible new approaches to the overall problem of handling the tuberculosis patient, with special attention to the influence of social and economic problems on the recalcitrant patient. The worker will be attached to the Southwestern Michigan Tuberculosis Sanatorium staff at Kalamazoo and will work especially with local health departments, and allied community agencies, sending patients to that institution.

Two public health nurses have been added and will be loaned on a direct service basis to local health departments to facilitate the prompt follow-up of the department's mass x-ray programs so essential to the effectiveness of the screening procedures.

The division plans to promote tuberculin testing in areas of high incidence of tuberculosis and also in areas with low morbidity and mortality, to help to determine the size of the reservoir of tuberculous infection in the population in general and in specific areas. It is believed that a comprehensive program of tuberculin testing will provide a reliable criterion of progress in the total control program.

DOCTOR HOFSTRA FILLS IN FOR DOCTOR ISBISTER

Raymond Hofstra, M.D., has been assigned to the Michigan Department of Health on loan to replace J. L. Isbister, M.D., Tuberculosis Control Officer of the Department while Dr. Isbister is on military leave. Dr. Hofstra has been doing clinical tuberculosis work in USPHS hospitals.

HEALTH DIRECTOR CHANGES

Joseph D. Heaslip, M.D., was appointed director of the Barry County Health Department effective July 1, succeeding Dr. Virgil Slee.

E. J. Brenner, M.D., became director of the Shiawassee County Health Department on July 6.

W. A. Werner, M.D., is the new director of the Dickinson-Iron District Health Department.

Gladys J. Kleinschmidt, M.D., has been appointed director of the Manistee-Mason District Health Department effective August 1.

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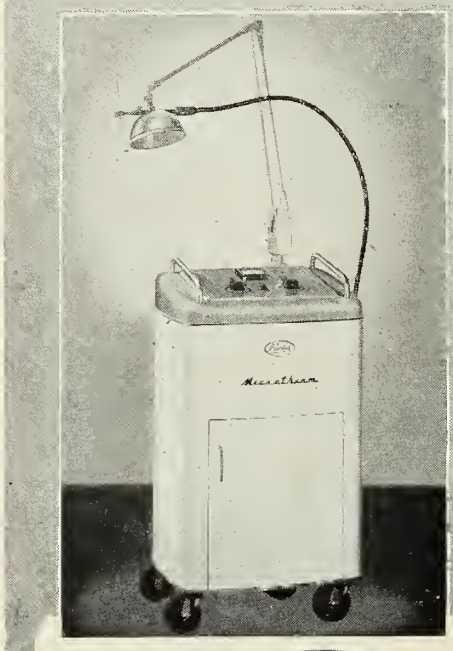
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In Memoriam

ARTHUR M. GANNAN, M.D., Assistant Chief of Staff at St. Joseph Mercy Hospital, Detroit, died suddenly April 25, 1954, at his home. He was forty-eight years old.

A native of Hartford City, Indiana, Dr. Gannan came to Detroit thirty-five years ago. He was a graduate of the Detroit College of Medicine, now a part of the Wayne University College of Medicine.

Surviving Dr. Gannan are his widow, Henrietta, one son, Dennis, his parents, and two brothers and two sisters.

JOHN M. GRAFF, M.D., who had practiced in Detroit for twenty-five years, died May 4, 1954, at the age of sixty.

Dr. Graff was graduated from the Detroit College of Medicine, now a part of Wayne University College of Medicine, in 1920. He was on the staff of St. Joseph Mercy Hospital.

Dr. Graff, who made his home in Utica, is survived by his wife, NaDean; a daughter, Mrs. Lawrence Pillars, a brother and three sisters.

EDWARD J. KALETA, M.D., of Flint, died April 7, 1954, when a revolver which he was examining in his home accidentally discharged. He was thirty-eight years old.

Dr. Kaleta was secretary of the medical staff at St. Joseph Hospital.

He served in the Army Medical Corps during World War II, achieving the rank of captain. For almost two years, he was overseas in the European Theater.

A native of Chicago, Dr. Kaleta was graduated from Holy Trinity High School there in 1933. He received his B.S. degree from Loyola University, Chicago, in 1937, and two years later was graduated from the Loyola School of Medicine. Dr. Kaleta entered practice in Flint in 1940.

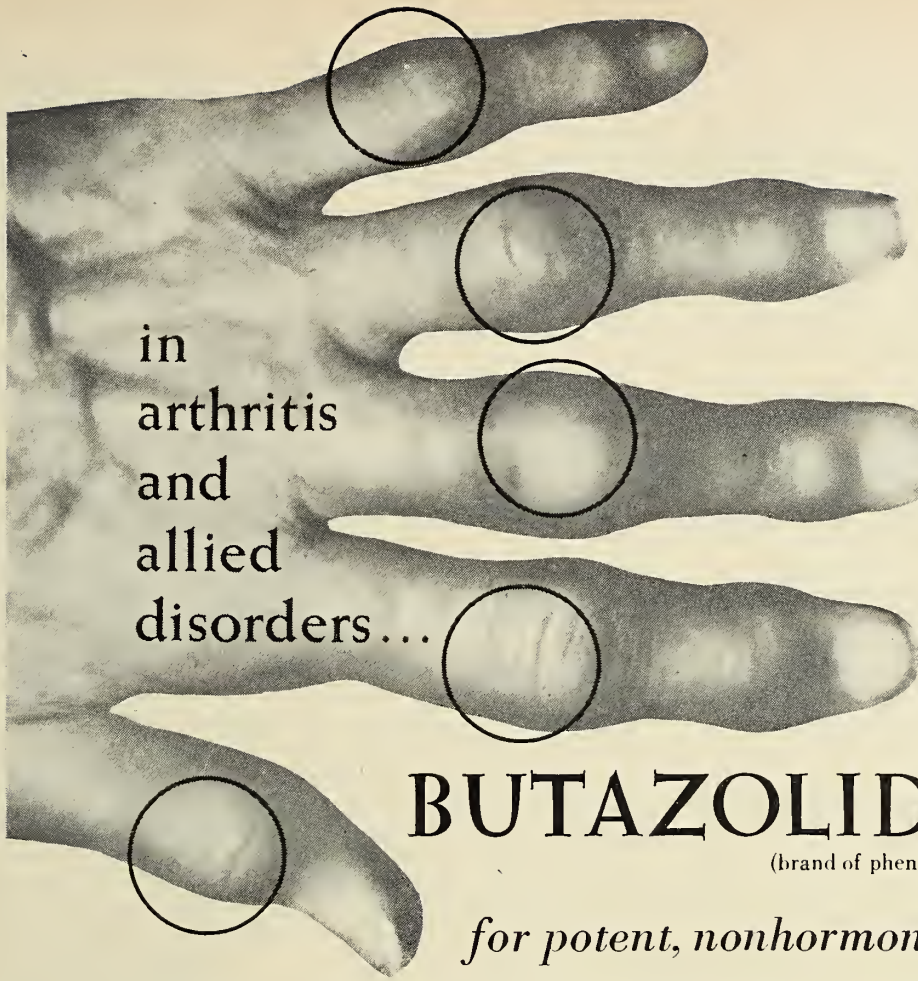
Survivors include his wife, Olga Arlene, two sons and a daughter.

WALTER J. MUELLENHAGEN, M.D., who had practiced for thirty-six years in Highland Park and Detroit, died May 9, 1954, at the age of sixty-one years.

Dr. Muellenhagen was a graduate of the former Detroit College of Medicine, now incorporated in Wayne University College of Medicine. A resident of Highland Park for twenty-eight years, until 1948, Dr. Muellenhagen had been active in Highland Park service club and civic affairs over a long period.

He was a member of the American Academy of General Practice.

Dr. Muellenhagen is survived by his wife Jeanette; two sons, Hugh W. and Walter J., Jr., and a sister.



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*MacKnight, J. C.; Irby, R., and Toone, E. C., Jr.: Geriatrics 9:111 (Mar.) 1954.

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MICHIGAN AUTHORS

Donald F. Waterman, M.D., Grand Rapids, is co-author with **Stanley M. Levenson, M.D.**, Richmond, Va., **Conrad L. Pirani, M.D.**, Chicago, Illinois, and **John W. Braash, M.D.**, Rochester, Minnesota, of an article entitled "The Effect of Thermal Burns on Wound Healing," published in *Surgery Gynecology and Obstetrics,* July, 1954.

Harold Fulton M.D., and **David J. Sandweiss, M.D.**, Detroit, are the authors of an article entitled "Intravenous Cholangiography—Preliminary Report," published in *Harper Hospital Bulletin,* May-June, 1954.

Clifford D. Benson, M.D., Detroit, is the author of an article entitled "Pre- and Post-Operative Care Problems in Surgery of the Infant and Child," published in *Harper Hospital Bulletin,* May-June, 1954.

Lynn A. Ferguson, M.D., James A. Ferguson, M.D., Ben R. Van Zwalenburg, M.D., and **Edward F. Ducey, M.D.**, Grand Rapids, are the authors of an article entitled "Clinical X-Ray Staff Conferences on the Colon —V. Cancer of the Colon Found in a Patient Demonstrating Complete Duplication of Structures on Hind Gut Origin," presented before the Eighteenth Annual Convention of the National Gastroenterological Association, Los Angeles, California, and published in the *American Journal of Gastroenterology,* July, 1954.

K. T. Johnstone, M.D., Saginaw, is the author of an article entitled "The Accident Parade," published in *Industrial Medicine and Surgery,* July, 1954.

W. S. Reveno, M.D., Detroit, is the author of an editorial entitled "Shall Doctors Pay for Their Medical Care?" published in the *Detroit Medical News,* June 14, 1954, and quoted in *Industrial Medicine and Surgery,* July, 1954.

A. F. Lecklider, M.D., Detroit, is the author of an article entitled "Industrial Medicine and Disaster, Atomic Bomb Preparedness," published in *Industrial Medicine and Surgery,* July, 1954.

Gordon A. Eadie, M.D., Ypsilanti, is the author of an article entitled "The General Motors Disaster at Livonia," published in *Industrial Medicine and Surgery,* July, 1954.

William H. Havener, M.D., Columbus, Ohio, and **John Woodworth Henderson, M.D.**, Ann Arbor, are the authors of an article entitled "Comparison of Flicker Perimetry with Standard Perimetric Methods," published in *A.M.A. Archives of Ophthalmology,* July, 1954.

Arthur C. Curtis, M.D., Florante C. Bocobo, M.D., E. Richard Harrell, M.D., and **Walter D. Block, Ph.D.**, Ann Arbor, are the authors of an article entitled "The Effect of Stilbenes and Related Compounds on the Mycoses," presented by Dr. Curtis before the Panel on Military Dermatology at the twelfth annual meeting of the American Academy of Dermatology and Syphilology, Chicago, Illinois, December 10, 1953, and published in the *United States Armed Forces Medical Journal,* July, 1954.

Aran S. Johnson, M.D., Paul G. Firnschild, M.D., and **Harold Fulton, M.D.**, Detroit, are the authors of an article entitled "Visualization of Coronary Sinus Graft and Venous Pathways of the Heart in Living Animals," published in *Harper Hospital Bulletin,* May-June, 1954.

John W. Smillie, Ann Arbor, is the author of an article entitled "The Effect of Streptokinase on Simulated Hyphemia, with a Study of Its Toxicity to Anterior Chambers of Rabbits," published in *The American Journal of Ophthalmology,* June, 1954.

Frank L. Rector, M.D., Chicago, formerly of Lansing, is the author of an article entitled "Cancer in Childhood," published in *Today's Health,* August, 1954.

Jean B. Rosenbaum, M.D., and **Darwood Hansen**, Detroit, are the authors of an article entitled "Simple Cardiac Pacemaker and Defibrillator," published in *The Journal of the American Medical Association,* July 24, 1954.

Martin J. Urist, M.D., South Haven, is the author of an article entitled "Diagnosis in Exotropia," published in the *American Journal of Ophtralmology,* July, 1954.

John M. Hammer, M.D., Patrick H. Seay, Ph.D., Albert De Groat, M.D., Kalamazoo, and **Frank W. Prust, M.D.**, Detroit, are the authors of an article entitled "Preserving Arterial Segments for the Blood Vessel Bank," published in *AMA Archives of Surgery,* July, 1954.

A. Ray Hufford, M.S., M.D., Grand Rapids, is the author of an article entitled "Integrative Esophagogastroscopy," presented as part of the Course in Postgraduate Gastroenterology of the National Gastroenterological Association, Los Angeles, California, October 15, 16, 17, 1953, and published in the *American Journal of Gastroenterology,* August, 1954.

M. O. Cantor, M.D., Andrew Scharf, M.D., and **Earle Acker, M.D.**, Detroit, are authors of an article, "The Effect of Variations of Position upon the Gastroduodenal Arterial Pressure," published in the *American Journal of Digestive Diseases,* July, 1954.

* * *

The first of four five-day courses to be given by the Army Medical Service during the present fiscal year on "The Medical Care of Atomic Casualties" began on August 24, 1954.

The courses, endorsed by the Secretary of the Ameri-

(Continued on Page 1044)

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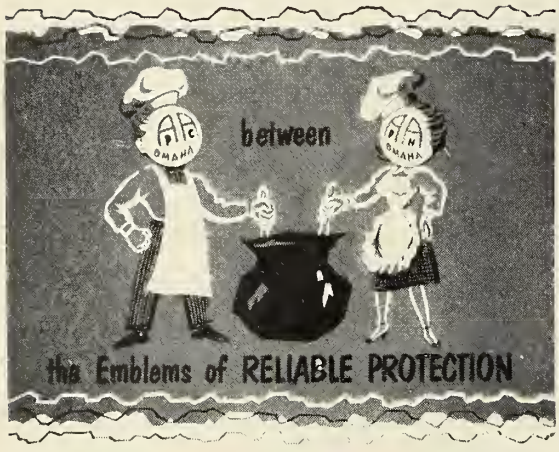
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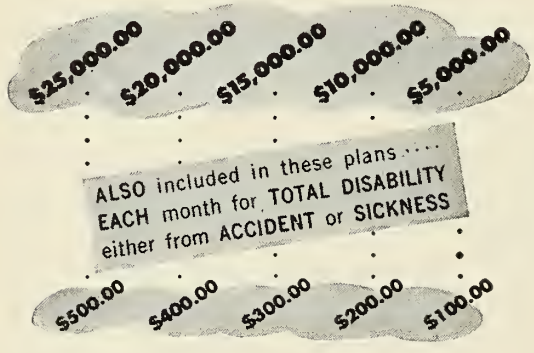
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(Continued from Page 1042)

can Medical Association and the Secretary of the Council on Emergency Medical Service of the American Medical Association, will be presented at the Army Medical Service Graduate School, Walter Reed Army Medical Center, Washington, D. C.

The other three courses to be presented during the fiscal year will be given on the following dates: October 25-30, 1954; January 10-15, 1955, and March 7-12, 1955.

The courses are open to active duty professional officers of the component corps of the Army Medical Service and to medical service professional personnel of the Air Force, Navy, Public Health Service, Veterans Administration and Civil Defense.

Army Medical Service personnel should submit application to the Office of The Surgeon General, Attention: Personnel Division, Career Management Branch. All others desiring to attend the course should direct their applications through their proper command or administrative channels.

* * *

A recent report by Oveta Culp Hobby, Secretary of Health, Education and Welfare, shows that at the end of 1953 nearly 6 million persons were receiving old-age and survivors insurance benefits (Social Security) at a monthly rate of $254 million. Michigan's total was 259,688 persons, receiving monthly benefits aggregating $11,882,329.

* * *

To increase the number of well-trained teachers in the field of preventive medicine, the National Foundation for Infantile Paralysis is now offering a limited number of senior fellowships to physicians interested in study and research in the teaching of preventive medicine. This is a new effort to bring support to this field.

The program of study may be undertaken at an approved school of public health or in a department of preventive medicine of an approved medical school.

Fellowships will be awarded for one or more years, with stipends ranging from $4,500 to $7,000 a year, depending upon marital status and number of dependents.

The fellowships will be awarded only to graduate physicians in good health who are United States citizens or applicants for citizenship, have completed at least one year of internship in an approved hospital and have had not less than two years of additional training and experience, including some teaching responsibility, in one of the specialties related to preventive medicine. Candidates are selected on a competitive basis by the Clinical Fellowship Committee of the National Foundation for Infantile Paralysis.

Each recipient of a fellowship must have the intention of teaching preventive medicine in the United States or its territories after completing his studies.

Fellowship applications are accepted any time during the year, but are activated only after Committee action. Applications received by September 1 are considered

(Continued on Page 1046)

WHEN SYMPTOMS ARE DISTRESSING BUT DISGUISED . . .

"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

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(Continued from Page 1044)

about November 1; those received by December 1 are considered about February 1; and those received by March 1 are considered on or about May 1.

For further information, address the National Foundation for Infantile Paralysis, Division of Professional Education, 120 Broadway, New York 5, N. Y.

* * *

Wm. A. Hudson, M.D., Detroit, was elected President of the American College of Chest Physicians at its twentieth annual meeting in San Francisco last June. Willard B. Howes, M.D., Detroit, was chosen as Regent for the District and Wm. P. Chester, M.D., Detroit, serves as Governor of the College for Michigan. The 1955 annual meeting will be held in Atlantic City, June 2-5.

* * *

A Conference on Silicosis and Occupational Chest Diseases will be held at Saranac Lake, New York, February 7-9, 1955, sponsored by the Saranac Laboratory and the McIntyre Research Foundation of Toronto. For program, write N. R. Sturgis, Jr., P.O. Box 551, Saranac Lake, N. Y.

* * *

C. C. Sturgis, M.D., Ann Arbor, President of the American College of Physicians, will preside at a television panel through a national closed circuit over CBS on September 23. The symposium will be beamed to ACP members on "Management of Hypertension." The telecast is made possible through the co-operation of Wyeth, Inc., of Philadelphia, and marks the first nationwide closed circuit hook-up for postgraduate medical education.

Doctor Sturgis is a member of the new Scientific and Educational Council of the American Foundation for Allergic Diseases, recently created to promote more research and wider professional education in the field of the allergic diseases.

* * *

"Newer Developments in Cardiovascular Diseases" is the title of a course to be given at Mt. Sinai Hospital, New York City, October 11-15, 1954, under the auspices of the American College of Physicians. For program, write A. M. Master, M.D., 5th Avenue, and 100th Street, New York 29, N. Y.

* * *

The Sixth American Congress on Obstetrics and Gynecology will be held at the Palmer House, Chicago, December 13-17, 1954. For program, write 116 S. Michigan Avenue, Chicago 3, Illinois.

* * *

The Academy of Psychosomatic Medicine will devote its annual meeting to be held at the Plaza Hotel, New York City, October 8 and 9, 1954, to "Psychosomatic Aspects of Surgery." For program, write Ethan Allan Brown, 75 Bay State Road, Boston 15, Massachusetts.

* * *

The Inter-Society Cytology Council will hold its annual meeting at the Statler Hotel, Boston, November

(Continued on Page 1048)

PARITY AND CONCEPTION CONTROL

A report covering a total of 425 patient years of exposure

A meticulous study[1] of 325 patients using jelly alone as a contraceptive measure notes a markedly higher degree of effectiveness for this technic "among patients of lower parity."

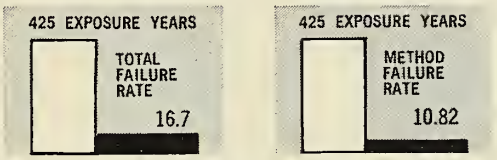
Apparently this significant conclusion can be attributed mainly to the anatomic factor. The less relaxed vagina in the lower parity group permits a more successful confinement of the jelly to the region of the external os.

For a period of three years, Guttmacher and associates[1] studied the efficacy of jelly-alone technic for contraception among multiparas and patients of lower parity. Although the method achieved marked success among all groups, a few unplanned pregnancies did occur. It was possible to categorize all of these unplanned pregnancies into either "method failures" or "patient failures." Patient failures were those wherein patients readily admitted occasional or frequent omission of the use of the jelly before intercourse. Method failures were attributed only to those cases where patients averred a complete adherence to the use of the jelly.

With 325 patients using the jelly-alone [RAMSES VAGINAL JELLY] technic for periods ranging from 3 months to 3 years, a computation showed that there was a total of 425 exposure years involved. The total unplanned pregnancy rate averaged only 16.7 per 100 patient years of exposure.

When method failures only were computed, the unplanned pregnancy rate dropped to 10.82 per 100 years of exposure.

1. Finkelstein, R.; Guttmacher, A., and Goldberg, R.: Am. J. Obst. & Gynec. 63:664, Mar., 1952.



Conception control in 325 patients using RAMSES Vaginal Jelly for 3 months to 3 years[1]

On the basis of observations, the conclusion is valid that while RAMSES VAGINAL JELLY is markedly effective as a jelly-alone technic, the method is "one of choice" in patients of lower parity and, of course, among the nulliparous.

Because parity, motivation, and patient intelligence all play a major part in the success of a contraceptive technic, the final basis for selection of the contraceptive method must rest with the physician whose judgment is predicated on a thorough evaluation covering all of these factors.

When in the judgment of the physician, parity, anatomic factors, or motivation indicate the use of the diaphragm-and-jelly method of contraception, the RAMSES® TUK-A-WAY® Kit is recommended. The RAMSES® diaphragm is flexible and cushioned—provides an optimum barrier and utmost comfort. In combination with RAMSES jelly it offers a reliable contraceptive technic.

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(Continued from Page 1046)

12 and 13, 1954. For program, write 634 N. Grand Blvd., St. Louis 3, Missouri.

* * *

The Third International Congress on Diseases of the Chest will be held at Barcelona, Spain, October 4-8, 1954. For information, write American College of Chest Physicians, 112 E. Chestnut Street, Chicago 11, Illinois.

* * *

The Ninth Postgraduate Course on Diseases of the Chest, sponsored by ACCP, will be held at Knickerbocker Hotel, Chicago, October 18-22, 1954.

* * *

The New York Acadamy of Medicine will hold its 27th Graduate Fortnight on "Infections and Their Management," October 18-29, 1954. For program, write the Academy at 2 E. 103rd Street, New York 29, N. Y.

* * *

The American Association of History of Medicine will hold its annual meeting in Detroit and Ann Arbor, May 12, 13 and 14, 1955. A. H. Whittaker, M.D., Detroit, is General Chairman of Arrangements.

* * *

The American Committee on Maternal Welfare, Inc., reports that, during the last twenty years, the reduction of maternal mortality has dropped from approximately seven per 1,000 live births down to a fraction of one per 1,000 live births.

* * *

The University of Michigan Medical Alumni Reunion Banquet will be held in the Banquet Room of the Veterans Memorial Building, Detroit, on Wednesday, September 29, 6:30 p.m. Dean A. C. Furstenberg, M.D., has promised a splendid program and cordially invites all graduates of Michigan, former interns and residents of University Hospital, their wives and friends. For information, contact R. M. Nesbitt, M.D., University Hospital, Ann Arbor. Tickets will be available opposite the MSMS registration desk, Sheraton-Cadillac Hotel, Sept. 29-30, Oct. 1, 1954.

* * *

Wayne University Alumni Association will hold its annual Alumni Banquet on Thursday, September 30, in the English Room of the Sheraton-Cadillac Hotel, Detroit, at 6:30 p.m.

Alumni, their wives and guests are cordially invited. Tickets will be available opposite the MSMS registration desk, Sheraton-Cadillac Hotel, Sept. 29-30, Oct. 1, 1954.

Donald S. Leonard, Detroit, will speak on "The Citizen's Responsibility."

The report of the Medical School to the Alumni will be presented, and the banquet program will be dismissed

(Continued on Page 1050)

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Personal communication (Apr. 12, 1950)

1951 Of 119 patients treated with Azulfidine prior to 1944, 90 patients (75%) were symptom-free or considerably improved when re-examined in 1949.

Svartz, N.: Acta. Med. Scandinav. 141:172, 1951.

1952 In a series of 52 patients with chronic ulcerative colitis 30, or 58%, showed significant improvement after treatment with Azulfidine.

Morrison, L. M.: Gastroenterology 21:133, 1952.

1953 *Morrison says:* "Azopyrine [Azulfidine] . . . has been effective in controlling the disease in approximately two-thirds of patients who had previously failed to respond to standard colitis therapy currently in use."

Morrison, L. M.: Rev. Gastroenterology 20:744 (Oct.) 1953.

literature available on request from:

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(Continued from Page 1048)

in time for all of the alumni to attend "State Society Night" in the Grand Ballroom of the Sheraton-Cadillac Hotel.

An Alumni Headquarters will be maintained at the Sheraton-Cadillac Hotel during the annual session.

* * *

The Jewish Consumptives' Relief Society Hospital of Spivak, Colorado, has opened one of its buildings, with a capacity of 100 beds, to admit medically indigent patients with malignant disease including cancer, leukemia, sarcoma, et cetera. This recent action resulted in more beds being available for tuberculous patients than there were applicants. Necessary alterations were made in the separate building set aside for the cancer program, which is limited to medically indigent patients, with no charge being made for any of the services provided. For information on the JCRS Hospital program, write Medical Director Jerome L. Leon, M.D.

* * *

The Wayne County Medical Society's Ethics Committee has recommended to The Council (WCMS) that before a doctor of medicine is dropped from membership in the county society for non-payment of dues, he be contacted by the WCMS Counselor Service to determine the reason for his non-payment of dues and to learn whether the Society may be of assistance. The Committee points out that, in the past, physicians have allowed their membership to lapse due to some misunderstanding that could have been clarified if the Society had been cognizant of the member's problem. The recommendation of the Ethics Committee was approved by The Council at its meeting of July 2.

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July 18	Beat the Heat	E. A. Irvin, M.D., Detroit O. Tod Mallery, M.D., Ann Arbor
July 25	Farm Safety Week	David G. Steinicke, East Lansing Mary Ellen Delsipee, Saginaw
Aug. 1	Alcoholism	Roland M. Athay, M.D., Detroit Dr. Paul T. Rankin, Detroit

* * *

"Mobilizing Your Personnel Resources For Better Patient Care" is the title of an informative brochure just released by the Office of Defense Mobilization, through

(Continued on Page 1052)

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(Continued from Page 1050)

Howard A. Rusk, M.D., Chairman of Health Resources Advisory Committee. For copies, write H. A. Rusk, M.D., Washington 25, D. C.

* * *

L. Fernald Foster, M.D., Bay City, Secretary of MSMS, was the principal speaker when the City of Lansing dedicated its beautiful new No. 3 Fire Station on August 4. His appearance was arranged by L. A. Drolett, M.D., long-time member of the Lansing Board of Police and Fire Commissioners. Dr. Foster has held key official and unofficial positions related to the development and modernization of the Bay City Fire Department and is considered an authority in the field of fire-fighting services and equipment.

Incidentally, the new No. 3 Station is only four blocks from 606 Townsend and has the primary responsibility for protecting the MSMS "home." This was mentioned by Secretary Foster in his dedicatory talk.

* * *

Roger DeBusk, M.D., has been appointed Director of the Grace Hospital, Detroit. Dr. DeBusk formerly was with the American Hospital of Oakland, California.

* * *

E. F. Sladek, M.D., Traverse City, Past President of MSMS, was elected Grand Medicin of the "40 and 8" of Michigan at its annual convention in July.

Research at University of Michigan.—As of August 2, 1954, the University of Michigan announced a total of fifty-one research grants to be conducted this year. Among the projects the following may be of interest to our readers:

Adam A. Christman, professor of biological chemistry, A Study of the Muscle Extractives Carnosine and Anserine; Great Lakes Research Institute, A Synoptic Limnological Study of Lake Huron; Felix G. Gustafson, professor of botany, Synthesis of B-Vitamin by the Root, Hypocotyl and Epicotyl of the White Lupine, when Cultured in Solution; Robert L. Hunter, instructor in anatomy, Study of the Relationship between Aliesterase and Gonadal Hormones; Carl D. LaRue, professor of botany, The Effects of Various Morphogenetic Factors on the Morphology of the Gametophytes and Sporophytes of Bryophytes, Pteridophytes and Spermatophytes; Gordon E. Peterson, associate professor of speech, A Method of Speech Synthesis; Lawrence B. Slobodkin, instructor in zoology, The Effect of Exploitation of Daphnia Populations; Alexander H. Smith, professor of botany, A Manual of the Fleshy Hymenomycetes of the Western United States; and L. C. Stuart, associate professor of zoology, Studies of the Herpetofauna of the Sierra De Los Cuchumatanes of Guatemala.

The Committee on Dictionaries, Middle English Dictionary; Ernst Pulgram, associate professor of

(Continued on Page 1054)

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(Continued from Page 1052)

Romance Languages and of Classical Linguistics, (1) Research in Gubbio, Italy, (2) Book; In Conjunction with Sabbatical Leave, 1954-1955.

George Herman, assistant professor of speech, Quantitative Study of Recruitment of Loudness in Hearing Loss; and Makepeace U. Tsao, assistant professor of biochemistry, Blood Chemical Study of Uremia.

Donald B. Canham, associate supervisor in physical education and head track coach, A Comparative Study of European Physiological Experiments and Training.

George R. L. Gaughran, instructor in anatomy, Muscle Group Forces at Joints; Volney H. Jones, Curator of Ethnology, Museum of Anthropology, Preparation of a Compendium of Data on Economic Botany of Indians of the Southwest; George H. Lauff, instructor in zoology, Primary Production of Organic Matter in an Aquatic Environment; Clifford R. Noll, Jr., instructor in biological chemistry, Study of the Organic Acid and Amino Acid Composition of Plants; Frederick K. Sparrow, professor of botany, Revision of "Aquatic Phyconmycetes"; and Lewis E. Wehmeyer, professor of botany, Perithecial Development in the Pyrenomycetous Fungi.

Irwin Brown, senior clinician, Speech Clinic, Drug Therapy in the Rehabilitation of Dysphasic Patients; Russell N. DeJong, chairman of the Department of Neurology, and Elizabeth C. Crosby, professor of anatomy, Experimental Studies on the Central Nervous System; Robert E. Moyers, professor of dentistry, A Study of the Instantaneous Centers of the Rotation of the Jaw; and Albert H. Wheeler, assistant professor of bacteriology, Immunologic Studies to Resistance to Induced and Transplantable Tumors in Tissue Treated Mice.

* * *

AMA Meeting.—Michigan registrants at the June, 1954, San Francisco session of the AMA included the following MSMS members:

Arnold O. Abraham, M.D., Hudson; George D. Albers, M.D., Grand Rapids; M. J. Albert, M.D., Saginaw; Warren W. Babcock, M.D., Detroit; R. H. Baker, M.D., Pontiac; Leo H. Bartemeier, M.D., Detroit; Vernon V. Bass, M.D., Saginaw; Robert Berry, M.D., Ann Arbor; Oscar Bigman, M.D., Detroit; Paul Boothy, M.D., Lawrence; Carl F. Boothby, M.D., Hartford; Philip E. M. Bourland, M.D., Calumet; H. E. Branch, M.D., Flint; Wm. Bromme, M.D., Detroit; R. C. Buerki, M.D., Grosse Pointe; W. D. Butt, M.D., Detroit.

A. J. Dalgleish, M.D., Watervliet; Milton A. Darling, M.D., Detroit; Ralph Ernest Dawson, M.D., Flint; Carleton Dean, M.D., Lansing; Carleton R. Dean, M.D., Detroit; Alphonse R. Deresz, M.D., Detroit; John S. DeTar, M.D., Milan; Harry M. Dickman, M.D., Hudson; J. Lewis Dill, M.D., Detroit; F. D. Dodrill, M.D., Bloomfield Hills; Wilbur E. Dolfin, M.D., Ann Arbor; Edward Dowdle, M.D., Detroit; Ira G. Downer, M.D., Detroit; Forrest M. Dunn, M.D., East Lansing; J. Colin Elliott,

(Continued on Page 1056)

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(Continued from Page 1054)

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Laslo Galdonyi, M.D., Detroit; Wm. G. Gamble, Jr., M.D., Bay City; B. F. Gariepy, M.D., Royal Oak; Lambert J. Geerlings, M.D., Fremont; L. O. Geib, M.D., Detroit; Wm. J. Gelhaus, M.D., Monroe; Harold R. Gilbert, M.D., Wyandotte; G. B. Goddard, M.D., Pickford; J. S. Graham, Jr., M.D., Grosse Pointe; Jacques P. Gray, M.D., Detroit; W. S. Greenlee, M.D., Detroit; Elisha S. Gurjian, M.D., Detroit; Ralph Hager, M.D., Hudsonville; L. James Hallen, M.D., Detroit; John M. Hammer, M.D., Kalamazoo; Marvin R. Hannum, M.D., Milan; Frank W. Hartmann, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; Glenn E. Hause, M.D., Detroit; W. D. Hayford, M.D., Lansing; H. J. Hazeldine, M.D., New Orleans; L. E. Henrich, M.D., Detroit; Robt. W. Heinle, M.D., Kalamazoo; B. I. Hirschowitz, M.D., Ann Arbor; D. C. Howe, M.D., Sault Ste. Marie; Wm. A. Hudson, M.D., Detroit; A. Ray Hufford, M.D., Grand Rapids; Leroy W. Hull, M.D., Detroit; T. S. Huminski, M.D., Grosse Pointe; W. H. Huron, M.D., Iron Mountain; Wm. A. Hyland, M.D., Grand Rapids.

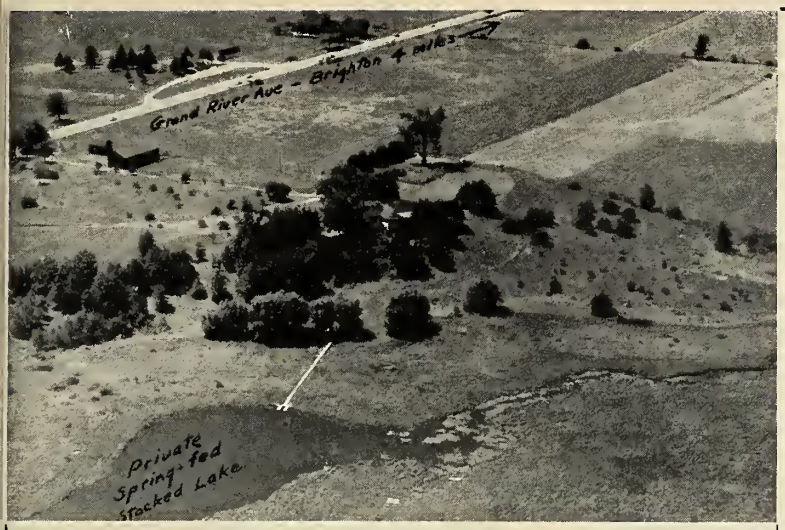
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SCHOOL HEALTH POLICIES

(Continued from Page 1034)

rechecked six weeks later and yearly thereafter if indicated.

(2) Screening for vision defects should be conducted yearly in the classroom by the teacher's administering a Snellen test. A Massachusetts Vision Test or a comparable test, should be administered every two years. Children with vision defects should have a thorough eye examination including the use of dilating drops.

(3) A record of the height and weight of each nursery, elementary and, where possible, through the eighth grade also, school child should be made twice during each school year by the teacher, or other personnel. Cumulative records should be kept and deviations from normal development reported to the parents.

D. Accident and First Aid. The following are recommended as school responsibilities:

(1) Immediate care and first aid.
(2) Notification of parents.
(3) Getting pupil home or to the hospital in an obvious emergency.
(4) Guiding parents to treatment sources and physicians when necessary.
(5) Emergency care information for each child should be kept on file in the school. Include physician's name, name of hospital to which the parents would prefer the child sent in an emergency, how to contact the parents, last immunization dates, tetanus toxoid and blood type if available.

E. The school should keep adequate written health records, including records of immunizations and examinations, and screening tests.

F. Teachers should be encouraged to be on the alert for physical defects and ill health. Teacher referral (as outlined in paragraph 3 of Section A-2) of pupils for physical examination and medical care should be stimulated. Each school should have a medical advisor to instruct teachers in observing health conditions of pupils.

G. Local medical societies should stimulate community interest in meeting the unmet health needs of school-age children within a community.

Members of the medical profession within their own community should encourage additional facilities and resources where needed, and should participate in public education programs concerning the availability of these facilities. It is recommended that there must be a free choice of services.

It is recommended that wherever feasible the county medical societies organize an active school health committee and use members of their speakers bureau who are qualified to discuss with P.T.A.'s the school health problem.

The services of the members of the American Academy of Pediatrics, Michigan Branch, will be available to discuss school health programs with P.T.A. groups who request same through their local physician and/or county medical society.

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TOXEMIA OF PREGNANCY. A symposium supported by grants from The National Heart Institute, Public Health Services; Ciba Pharmaceutical Products, Inc.; Parke, Davis & Co.; Hoffmann-LaRoche, Inc., and Irwin, Neisler & Co.

A METHODOLOGICAL PSYCHIATRIC AND STATISTICAL STUDY OF A LARGE SWEDISH RURAL POPULATION. By Tage Larsson and Torsten Sjögren. Copenhagen: Ejnar Munksgaard, 1954.

* * *

PERIPHERAL CIRCULATION IN MAN. A Ciba Foundation Symposium. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A,, M.B., B.Ch. and Jessie S. Freeman, M.B., B.S., D.P.H., assisted by Joan Etherington. 219 pages. 72 illustrations. Boston: Little Brown and Company, 1954. Price $6.00.

This volume consists of eighteen formal papers and the lengthy discussions that followed. The papers, read at a symposium sponsored by the Ciba Foundation, relate to the methods for studying blood flow, the change in circulation due to exposure to cold and heat, the actions of adrenaline and noradrenalin on blood flow, the neurohistology and reflex control of the circulation and the effects of sympathectomy, the significance of cold agglutinins, and the influence of visceral activity on the peripheral circulation. The reader will find the lengthy informal discussions of particular interest. Certainly, the laws governing blood flow in the vessels cannot be described with precision.

To the physiologist, the physician, the pathologist, and the surgeon this book is recommended.

J.W.H.

LECTURES ON THE THYROID. By J. H. Means, M.D. Jackson Professor of Clinical Medicine Emeritus, Harvard University; Former Chief of Medical Services, Massachusetts General Hospital; Physician, Massachusetts Institute of Technology. Cambridge: Harvard University Press, 1954. Price $3.00.

This 103-page monograph by an outstanding authority on diseases of the thyroid gland, summarizes nicely the function of the normal and the pathological thyroid in the light of the most recent investigative work. Doctor Means has a fine interpretation of the integrative action of the whole endocrine system and suggests that we re-evaluate the nonphysiologic use of ACTH and cortisone.

The thyroid hormone is discussed in some detail in one chapter, taking up the significance of its structure and of its action on end organs. The various uses of the thyroid hormones is reviewed, with the suggestion that cortical extract or cortisone might be beneficial in thyroid storm. The antithyroid drugs and use of radioactive isotopes is reviewed.

Say you saw it in the Journal of the Michigan State Medical Society

There is an interesting chapter on the etiology of Graves disease, and the surmise that the latter is somewhat analogous to the adaptation Syndrome of Selye except that it is pathological; might be called a "maladaptation syndrome." In reviewing the need for iodine, Doctor Means summarizes the information gathered in a field of study of the goiter endemic on the eastern slopes of the Andes, where enormous goiters are common. This book is of particular interest to the medical student and the researcher. S.B.W.

MAN ABOVE HUMANITY. A History of Psychotherapy. By Walter Bromberg, B.S., M.D. Foreword by Winfred Overholser, M.D., Sc.D. Philadelphia, London, Montreal: J. B. Lippincott Company, 1954. Price $5.75.

The title of this book, "Man Above Humanity" gives no clear indication of content. The subtitle, "A History of Psychotherapy" is somewhat more revealing, but even this needs some further definition. To quote, "Much of what we refer to as psychotherapy was part and parcel of the individual's attempt, through social institutions (e.g., religion, witchcraft, humanitarianism), to adjust to internal and external stresses that confronted him." As such, psychotherapy as used by the author, "represents one phase of man's attempt to rise above humanity."

The story begins in the very early period when "the attention of prehistoric man was consciously deflect from physical suffering to psychological pain—when he looked beyond the ache of a torn muscle to the existence of mental torment." From here, the thread of the story runs through the period of magic, witchcraft and then through the period when medical men began to take over the care and the treatment of the mentally ill in the asylums that still later were in need of a similar advance to present period of the "hospital."

The struggles of the 19th century leading to a return of faith healing as exemplified by Christian Science, on the one hand, and the activities of Mesmer, and Charcot leading to the beginnings of dynamic psychiatry, on the other, provide interesting and worthwhile reading. The book is written in an interesting fashion, is well documented and has a good index. It can be recommended not only to those engaged in psychotherapy, but also to all those who are interested in the psychology of "The Healer" in medicine. F.O.M.

MEANING OF SOCIAL MEDICINE. By Iago Galdston, M.D., Secretary, Medical Information Bureau, The New York Academy of Medicine. Published for The Commonwealth Fund. Cambridge, Massachusetts, Harvard University Press, 1954. Price $2.75.

The author is Executive Secretary of the Committee on Medical Information of the New York Academy of Medicine. He says he assumed the problem of studying and defining social medicine. We went to England in 1948, and to England and the Continent in 1951. He claims there is a difference between Staatsmedicin, social medicine, and socialized medicine. Socialized medicine started in Germany rather than in England. He says, "Unfortunately, the impulsion toward social medicine engendered in the war experiences were not sufficiently strong to carry the movement on through the peace years as well. It required a second world war to enfranchise social medicine." Again, "those who are laboring to achieve social medicine are convinced that in some significant respects medicine, including public health and preventive medicine, has failed. . . . "He disparages the medicine taught and practiced now as preventive, bacteriological and not curative of the whole patient. He wants to revamp the process of medical teaching.

On the whole, we are convinced the author is definitely in favor of Social Medicine, another name for the old socialized bugaboo. The book is comparatively short and well written. It could be a challenge, but we recommend it to be read with strict restraint.

THE PSYCHIATRIST, HIS TRAINING AND DEVELOPMENT. Report of the 1952 Conference on Psychiatric Education held at Cornell University, Ithaca, New York, June 19-25, 1952. Organized and conducted by the American Psychiatric Association and the Association of American Medical Colleges. Editorial Board: John C. Whitehorn, M.D., Chairman; Francis J. Braceland, M.D.; Vernon W. Lippard, M.D.; William Malamud, M.D. Editorial Assistants: Stella Bloch Hanau, Robert L. Robinson. Washington: American Psychiatric Association, 1953. Price $2.50.

This book is a result of a conference conducted by the American Psychiatric Association in order to establish basic principles for the training of psychiatrists. It

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is a comprehensive survey of psychiatric residency training. There is a report of a special Commission on Psychodynamic Principles. The text covers the objectives, content and methods of the specialty, its growth, problems and basic concepts. Sections are devoted to special fields such as administrative, forensic, industrial, military, psychosomatic, and child psychiatry. Psychoanalysis in regard to training is discussed.

This volume appears to present a worthwhile outline for a program for those institutions that are already giving psychiatric training or contemplate setting up a psychiatric residency.

G.K.S.

PR REPORT

(Continued from Page 962)

feature tying together the Memorial with the significance of Dr. Beaumont's findings (five stations to date).

In addition special films were taken for Mort Neff's popular statewide sports telecast for use in August or September.

Requests for Beaumont Memorial information are still being received by the MSMS PR Department; the Beaumont story will be told and re-told far into the future. Still pending, of course, is the long documentary motion picture on Dr. Beaumont, in color, which the University of Michigan is producing. A highlight of this documentary will be the Beaumont Memorial Dedication, which was filmed in sound and color by a crew of professionals.

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$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

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Basic Principles in General Surgery, two weeks, September 20
Breast and Thyroid Surgery, one week, October 25
Thoracic Surgery, one week, October 11
Esophageal Surgery, one week, October 4
General Surgery, two weeks, October 4; one week, October 4
Gallbladder Surgery, ten hours, October 25
Fractures and Traumatic Surgery, two weeks, October 25
GYNECOLOGY—Office and Operative Gynecology, two weeks, September 20
Vaginal Approach to Pelvic Surgery, one week, September 13
OBSTETRICS—General and Surgical Obstetrics, two weeks, October 4
MEDICINE—Two-week Course September 27
Electrocardiography and Heart Disease, two weeks, October 11
Gastroenterology, two weeks, October 25
Gastroscopy, one week, September 13
RADIOLOGY—Diagnostic Course, two weeks, October 4
Clinical Uses of Radio Isotopes, two weeks, October 4
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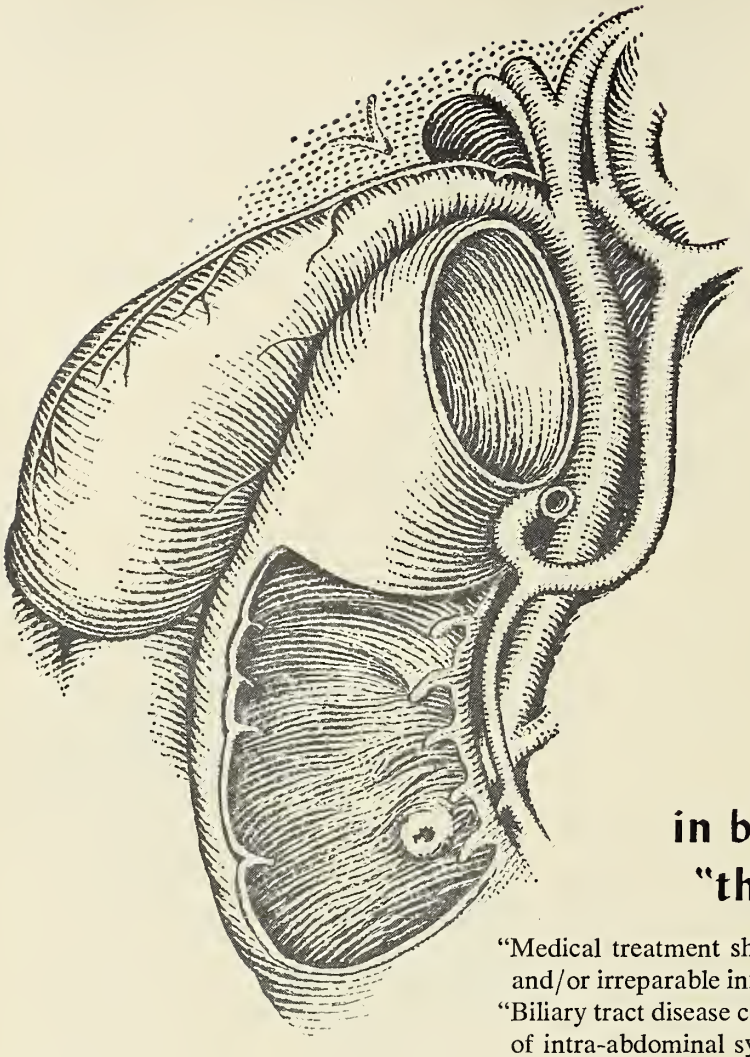
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1. Segal, H.: Postgrad. Med. *13*:81, 1953. 2. O'Brien, G. F., and Schweitzer, I. L.: M. Clin. North America *37*:155, 1953. 3. Beckman, H.: Pharmacology in Clinical Practice, Philadelphia, W. B. Saunders Company, 1952, p. 361.

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*Kaufman, R. H.; Mendelowitz, S. M., & Ratzan, W. J.: *Am. J. Obst. & Gynec.* 65:269, 1953.

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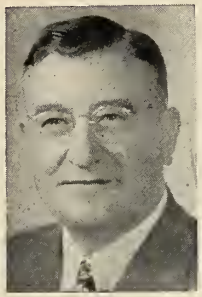
THE JOURNAL
of the Michigan State Medical Society

VOLUME 53 OCTOBER, 1954 NUMBER 10

Contributors to This Issue



JEROME W. CONN, M.D.



ROBERT C. MOEHLIG, M.D.



JOHN H. WARVEL, M.D.

THE FRONT COVER

The man returning the serve ball is Bill Talbert, a top flight player, former Davis Cup team member, who has been taking insulin for years.

The baseball player *(top left)* is Bill Nicholson, recently retired from the Big League. He played with the Phillies for years, and much of that time was a diabetic, controlled by diet and insulin.

The left center photograph shows Mrs. Claire Vernon Rider, Employment Director for the J. C. Penney Company, with her collection of pill boxes. She is also a well-known diabetic.

At the lower left are the two Davis Cup Stars, Bill Talbert and Ham Richardson, both of whom have demonstrated that diabetes should not prevent a strenuous life.

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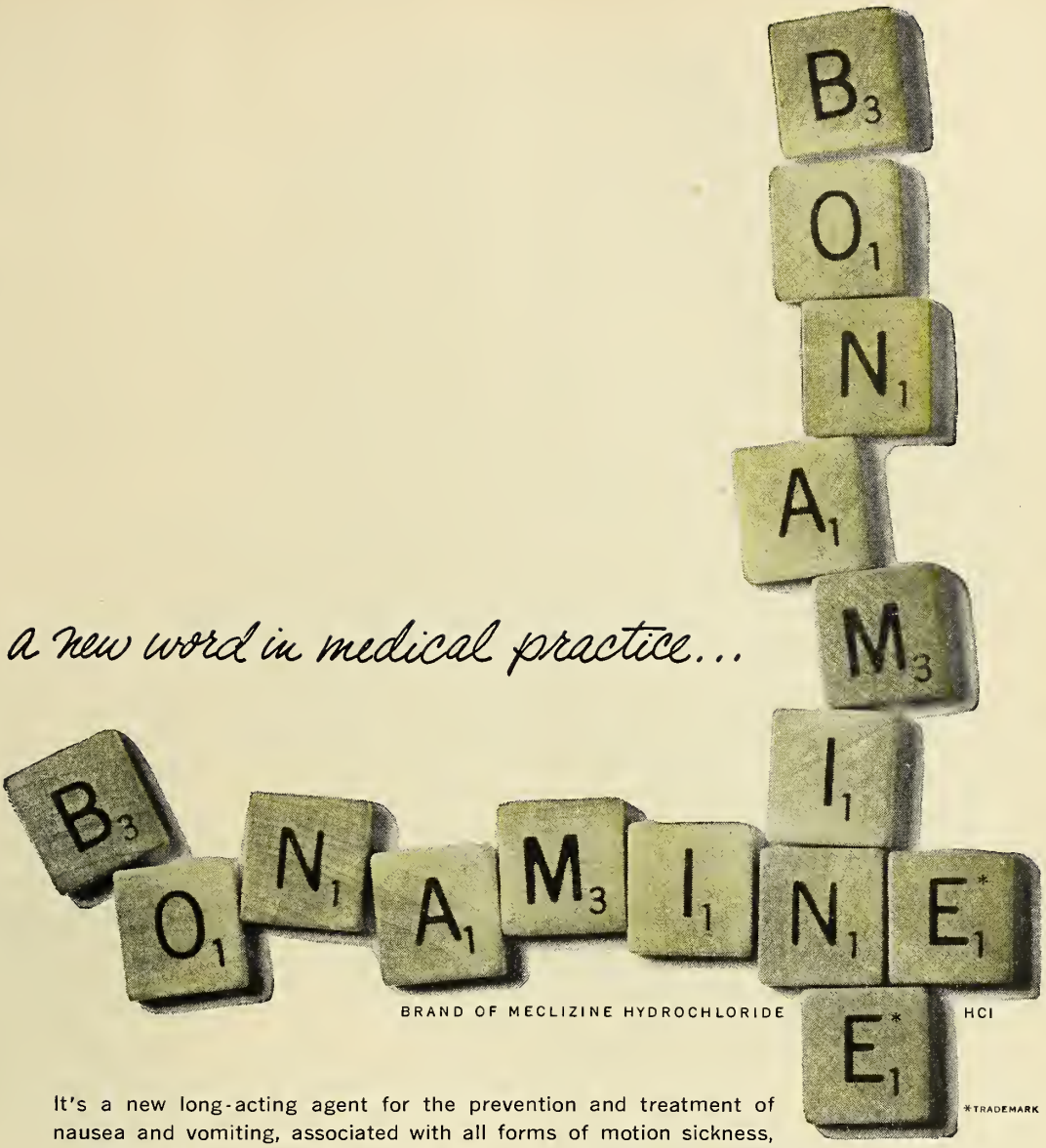
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The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 4, 1955.

Case abstracts numbering 20 are to be sent by the candidate to the secretary as soon as possible after receiving notification of eligibility to the Part I written examination. Candidates are reminded at this time that lists of hospital admissions must accompany new applications and requests for reopening.

For further information contact the Board secretary, Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

DOES THE AMA CONTROL THE SUPPLY OF DOCTORS IN THE UNITED STATES?

Long plagued with the idea that control of the M.D. supply in this country is its monopoly, the American Medical Association strongly refutes that idea in its fifth annual Medical Education Report.

A record ratio of one M.D. for every 730 persons in the United States has been reached during the past year. The graduation of the largest class of doctors of medicine in history, and the continued expansion of the nation's medical schools, gave this splendid result.

A total of 6,861 doctors were graduated during 1953-1954; this brings the nation's M.D. population to 220,100.

More good news is that the number of medical graduates is expected to rise more rapidly than the general population. The enrollment of 28,227 is the greatest number of students in medical education in the history of the United States.

The freshman class enrollment of 7,449 also is a record.

Ten new four-year medical schools are in the construction or planning stage and will be in operation within the next five or six years.

More than $76,000,000 was spent during 1953-1954 for new facilities, remodeling or completion of buildings for medical instruction.

Medical school budgets during the ensuing year will total more than $143,000,000!

And last but not least, 21,328 doctors of medicine did volunteer teaching—without pay—during the past year to aid in educating medical students throughout the nation.

Doctor, tell the above story to your patients, to your friend the newspaper editor, and to your local labor leaders. The AMA and the American Medical Education Foundation have done, and are doing, wonders in increasing the number of medical schools and the number of medical students. Criticisms to the contrary are now "old hat."

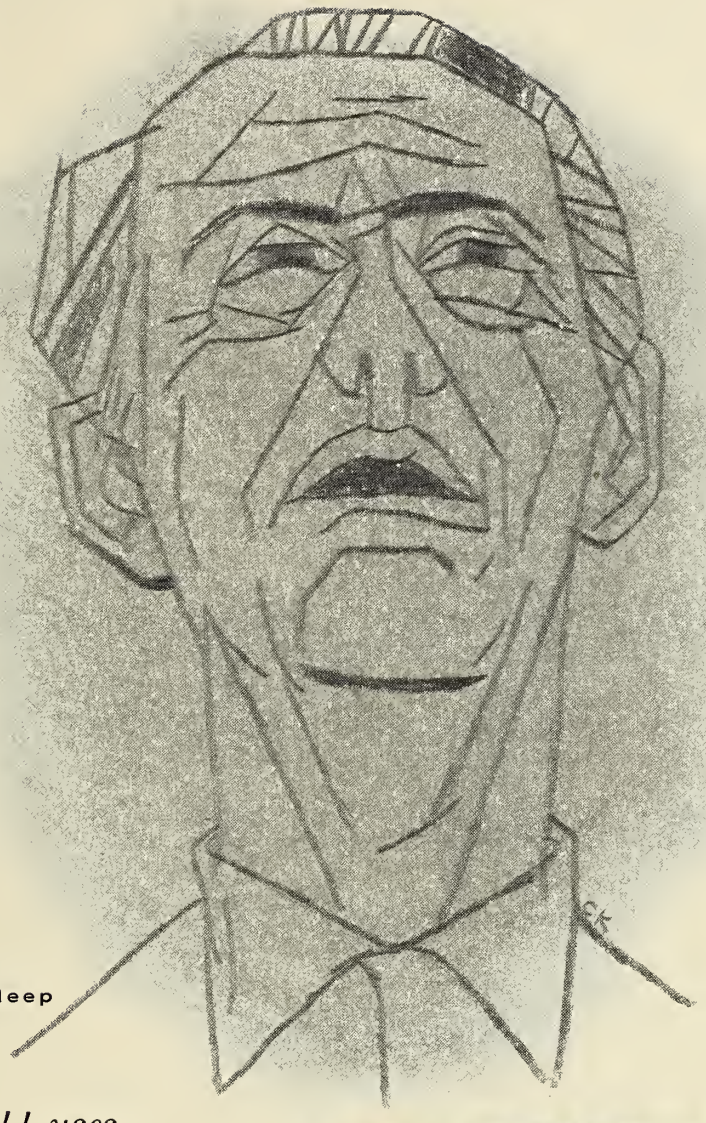
HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of August 18, 1954

Seventy-three items were presented to the Executive Committee of The Council at its August 18 meeting in Birmingham, held in the home of President-Elect R. H. Baker, M.D. Items of chief importance were:

- **Annual Conference on Aging,** sponsored by the University of Michigan. The Executive Committee approved cooperation with this 1955 Conference in Ann Arbor, provided the Michigan State Medical Society is included in the planning phase of the Conference.
- **Items for supplemental** Annual Report of The Council, including statement re polio vaccine, were discussed and approved for inclusion.
- **President L. W. Hull, M.D.,** Detroit, reported that AMA President-Elect Elmer Hess, M.D., Erie, Pennsylvania, would attend MSMS Annual Session in Detroit and speak on Officers Night, September 29, on "Why is the AMA Right About VA Medicine?"
- **Committee Reports.** The following committee reports were presented: (a) Committee on Arbitration, meeting of July 16; (b) Liaison Committee with Michigan Medical Service, July 17; (c) Scientific Radio Committee, July 28; (d) Committee on Medical Economics—Ethics Courses in Michigan Medical Schools,

(Continued on Page 1072)



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1070)

July 30; (e) Legislative Committee, August 4; (f) Medical Advisory Committee to Michigan Hospital Service, August 8; (g) Periodic Health Appraisal Committee, August 17; (h) Awards Committee, August 18; (i) Special Advisory Committee to Chairman of Finance Committee, August 18.

- **President-Elect R. H. Baker, M.D.,** Birmingham, presented personnel of committee chairmen for the MSMS calendar year 1954-1955.
- **A letter of congratulation** from William A. Hyland, M.D., to the MSMS Public Relations Committee Chairman and the PR personnel for recent work in Kent County was read.
- **C. L. Weston, M.D.,** Owosso, was chosen as Chairman of the Press Relations Committee for the 1955 Michigan Clinical Institute; personnel of the Committee is A. B. Gwinn, M.D., Hastings; R. A. Johnson, M.D., Detroit; H. F. Dibble, M.D., Detroit, and G. B. Saltonstall, M.D, Charlevoix. The dates for the MCI through 1963, to be held at the Sheraton-Cadillac Hotel, Detroit, were decided by the Executive Committee of The Council.
- **Robert Bannow, M.D.,** Pontiac; Carleton Dean, M.D., Lansing; R. A. Johnson, M.D., Detroit; M. H. Pike, M.D., Midland, and H. B. Zemmer, M.D., Lapeer, were chosen as Medical Advisors to the United Health and Welfare Fund.
- **H. W. Bird, M.D.,** Detroit, Chairman of the MSMS Mental Health Committee, was appointed to represent MSMS at the AMA Committee on Mental Health meeting in Chicago, September 17-18.
- **Past Presidents** R. J. Hubbell, M.D., Klamazoo; Claude R. Keyport, M.D., Grayling, and C. E. Umphrey, M.D., Detroit, with Legal Counsel J. Joseph Herbert as advisor, were appointed as a Committee of The Council to study and make recommendations for revisions in the MSMS By-Laws regarding ethics, grievance and mediation.
- **The Public Relations Counsel's** monthly report

(Continued on Page 1140)

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1954		
November 2-5	National Society for Crippled Children and Adults	Boston
November 10-11	Eighth Annual Fall Post-Graduate Clinic, Michigan Academy of General Practice	Detroit
November 17	Executive Committee, MSMS Council	Detroit
November 29-December 2	AMA Clinical Session	Miami
December 15	Executive Committee, MSMS Council	Detroit
1955		
January 27-28-29	Annual Meeting MSMS Council	Detroit
January 30	Annual County Secretaries-Public Relations Conference	Detroit
February	Executive Committee, MSMS Council	
February	Conference, Executive Secretaries, County Medical Societies	Lansing
March 8	Michigan Chapter, American College of Surgeons	Detroit
March 9-11	Michigan Clinical Institute	Detroit
March	Executive Committee, MSMS Council	
Spring	MSMS Postgraduate Extramural Courses	Statewide
April 13	Genesee County Medical Society's Tenth Annual Cancer Day	Flint
April	Executive Committee, MSMS Council	
May 11	Annual Clinic Day and Alumni Reunion, Wayne University College of Medicine	Detroit
May	Executive Committee, MSMS Council	Charlevoix
May	Twenty-Seventh Annual May Clinic, Ingham County Medical Society	Lansing
June 17-18	Upper Peninsula Medical Society	Gateway
June 6-10	Annual Session, American Medical Association	Atlantic City
June	Executive Committee, MSMS Council	
July 14-16	Mid-summer Session, MSMS Council	Mackinac Island
August	Executive Committee, MSMS Council	
September 26-27	Annual Session of the House of Delegates (MSMS)	Grand Rapids
September 28-30	MSMS Annual Session	Grand Rapids
September 25 & 30	MSMS Council	Grand Rapids
October	Clara Elizabeth Fund for Maternal Health and Genesee County Medical Society	Flint
October	Michigan Cancer Conference	Lansing
Autumn	MSMS Postgraduate Extramural Courses	Statewide

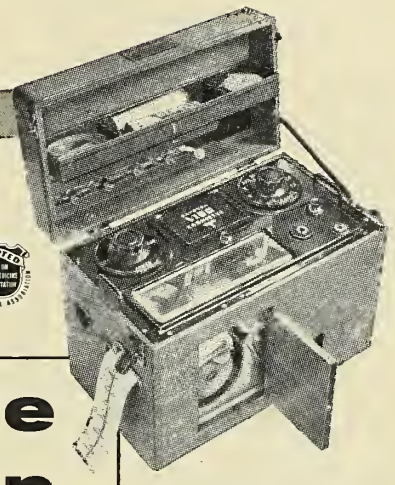
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Constitutional Amendment Proposal No. 2

"The Conlin Plan"

An answer to Michigan's financial dilemma developed by State Representative Rollo G. Conlin, Tipton, Michigan

Michigan school funds come from several sources; the principal one involves sums of money which actually are appropriated by constitutional amendment. Over a period of three years there has been an opportunity to watch the effect of the present provision upon the school districts and the state fiscal operation.

A plan is offered here which would clear up some of the inequities and some of the difficulties involved. In presenting this plan it should be made amply clear: first, that there will be no reduction in the funds to schools; second, that the appropriations will be made upon a current basis which would prove beneficial to the state and to the schools; third, there will be full protection for the school employes' retirement fund.

In any discussion of change in the constitutional provision, referred to as "Sales Tax Diversion," it is important to make the distinction between constitutional law and statutory law.

Statutory law is subject to change by legislative action each year. The legislature may, by amending the statutes, improve the law or make such adjustments as are necessary to meet changing conditions.

This flexibility is not possible with a constitutional amendment, which is rigidly fixed and cannot be changed by the legislature. Only by a vote of the people can a change be made in a constitutional amendment, and then only after a prolonged period of time and an expensive and lengthy educational program, informing the voters of the reason and purpose for such change.

For these reasons the constitution should be considered as the structural framework for statutory law, leaving to the legislature the responsibility of enacting the laws necessary to fulfill the purpose set forth within the constitution.

By this procedure, rigid protection of the purpose is achieved, while the flexibility necessary to meet changing conditions is not sacrificed. In working out the details of the proposed amendment to "Sales Tax Diversion," the proposal described in the following paragraphs reflects these fundamental principles.

This proposal continues the one-half cent of sales tax that is returned presently to cities, villages and townships. It does, however, *exclude* 50 per cent of the patients and convicts domiciled in or committed to state institutions (located within the boundaries of these local units) from the per capita distribution of these funds.

It also provides that beginning July 1, 1955, 2 cents of the 3 cent sales tax be set aside in a fund separate and distinct from the state general fund and dedicated exclusively for school aid and retirement purposes. From this fund the legislature would appropriate by law to the school districts and for the respective retirement funds, in much the same manner as those appropriations are now made.

This proposal would put school aid on a current basis and give the schools districts a rigid guarantee of their revenue. It would further give the flexibility of legislative review and determination for the distribution and allocation of these funds as needed to meet changing conditions.

The proposal includes the stipulation that prior to the division of sales tax collections the cost of collections, as determined by the Commissioner of Revenue, shall be deducted and credited to the general fund. This provision prorates the cost of sales tax collection among all the beneficiaries and will assure future adequate enforcement of collections.

There is no provision in this proposal which prevents the legislature from supplementing each of these funds when the need is demonstrated.

Summary

Provides one-half cent of a sales tax on each dollar of sales of tangible personal property for cities, villages and townships, and continues the distribution on a population basis. It does, however, eliminate from the population count, 50 per

(Continued on Page 1076)

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(Continued from Page 1074)

cent of the patients and convicts who are wards of the State (this has been one of the objections to that part of the present amendment).

Provides for two cents of a sales tax levy on each dollar of tangible personal property to be deposited in a special school aid fund separate and distinct from the state general fund.

Provides that the school aid appropriation be made by the legislature from revenues guaranteed by the constitution (and deposited in the special school aid fund) in the same manner as the present School Aid formula. Retirement funds are also to be appropriated from this fund in amounts ranging from 5 to 7.5 per cent of salaries as provided in the retirement law.

Provides that the one-half cent that is at present distributed on school census basis may be placed under formula and distributed on an enrollment basis. Leaves primary school fund intact.

Provides for automatic prorating of the cost of collection of the sales tax between all agencies receiving benefits under the plan. This assures adequate enforcement of collection. (Precedent for this provision is found in Art. 10, Sec. 22, of the Constitution dedicating gasoline and weight taxes for highway purposes.)

Provides for payments to school district from sales tax collections the same year that collections are made. (Puts schools on current basis.)

Provides automatically for the rise and fall of business indices because sales taxes are a reflection of prices and volume and also reflect population increase, the plan does not need any reference to business indices.

Continue the administration of school funds within the Department of Public Instruction.

Recognizes the obligation of the state to the school districts and to the school employes' retirement funds.

Does not prevent special appropriation within the school aid formula such as are now present.

Does not freeze the school aid allocation formula into the constitution or prevent change or improvement in public school employes' retirement system.

An amendment approved by the House would freeze the sales tax at the present 3-cent level.

Provides for adjustment of funds at the transition period.



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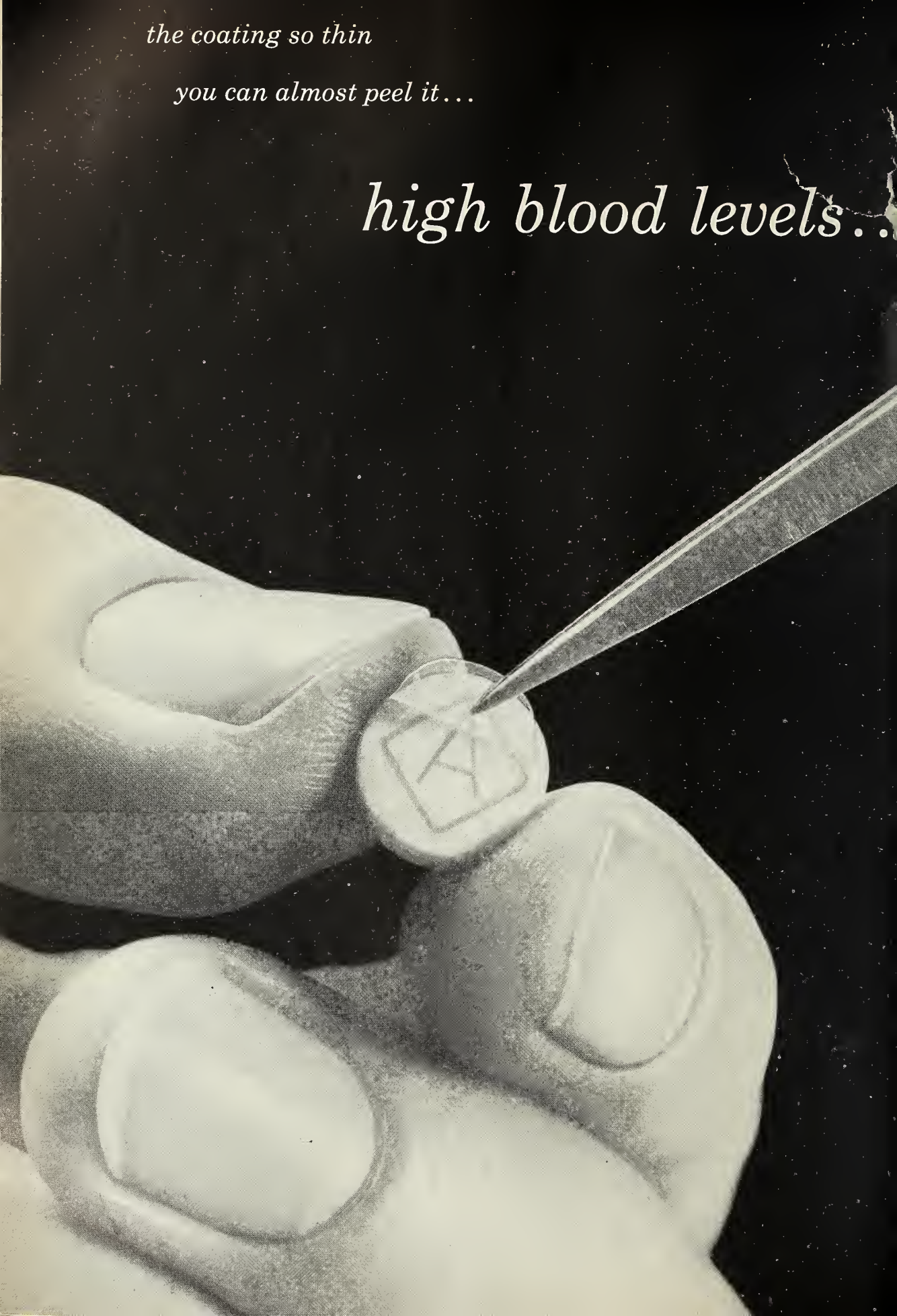
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"Golden Goose" Speakers Blanket Michigan

Nine selected speakers traveled thousands of miles in Michigan during the past year to conduct some 70 "Golden Goose" meetings with county medical societies, hospital staffs and other groups concerned with voluntary hospitalization insurance.

At the request of Michigan's Blue Cross, the speakers were recruited by the MSMS Advisory Committee to Michigan Hospital Service to spread the message of the services available under Blue Cross-Blue Shield and their most effective utilization. William S. Reveno, M.D., of Detroit, is chairman of the Advisory Committee.

Arrangements for "Golden Goose" meetings were placed in the hands of MSMS Councilors. Details were worked out by each man in his own Councilor District.

Following is the statewide schedule of "Golden Goose" meetings so ably carried out—most often at considerable personal sacrifice—by MSMS representatives:

E. C. Baumgarten, M.D., Detroit, addressed: Deaconess Hospital, Detroit; University Hospital, Ann Arbor; St. Joseph County Medical Society, Sturgis; Saginaw County Medical Society, Saginaw; Providence Hospital, Detroit; Kalamazoo Academy of Medicine, Kalamazoo; Mercy Hospital, Bay City; Macomb County Medical Society, Mt. Clemens; St. John's Hospital, Detroit; Oakwood Hospital, Dearborn, and Washtenaw County Medical Society, Ann Arbor.

William Bromme, M.D., Detroit: Menominee County Medical Society, Marinette, Wis.; Dickinson County Hospital, Iron Mountain; Gogebic County Medical Society, Ironwood; Houghton County Medical Society, Houghton; Highland Park General Hospital, Highland Park, and Blodgett Memorial Hospital, Grand Rapids.

L. Fernald Foster, M.D., Bay City: Port Huron General Hospital, Port Huron; Van Buren County Medical Society, Bangor; St. Mary's Hospital, Grand Rapids; Butterworth Hospital, Grand Rapids; Mason County Medical Society, Ludington; Mecosta-Osceola-Lake County Medical Society, Big Rapids; Community Memorial Hospital, Cheboygan; Northern Michigan Medical Society, Petoskey; Jackson County Medical Society, Jackson; Medical Society of North Central Counties, Roscommon; Alpena General Hospital, Alpena; Monroe County Medical Society, Monroe; Chippewa-Mackinac County Medical Society, Sault Ste. Marie; Delta-Schoolcraft County Medical Society, Escanaba; Marquette-Alger County Medical Society, Marquette; Huron, Lapeer, and Sanilac County Medical Societies, Marlette; Berrien County Medical Society, Niles; University of Michigan Senior Medical Students, Ann Arbor; Saginaw Valley Health and Accident Underwriters, Bay City, and Public Health District Meeting, Rogers City.

Robert L. Novy, M.D., Detroit: Macomb County Medical Society, Mt. Clemens; Oakland County Medical Society, Pontiac; Harper Hospital, Detroit; Grace Hospital, Detroit; Woman's Hospital, Detroit; University Hospital, Ann Arbor; Conference of Senior Medical Students Residents and Interns, Michigan Clinical Institute, and "Golden Goose" Breakfast, Michigan Clinical Institute.

Bradley M. Harris, M.D., Ypsilanti: Lenawee County Medical Society, Adrian, and Livingston County Medical Society, Howell.

William M. LeFevre, M.D., Muskegon: Calhoun County Medical Society, Battle Creek; Muskegon Couny Medical Society, Muskegon; Newaygo County Medical Society, Fremont; Butterworth Hospital, Grand Rapids; Manistee County Medical Society, Manistee; Grand Traverse-Leelanau-Benzie County Medical Society, Traverse City; Wexford-Missaukee County Medical Society, Cadillac; Oceana County Medical Society, Hart, and Muskegon County Medical Assistants Society, Muskegon.

J. D. Miller, M.D., Grand Rapids: Barry County Medical Society, Hastings; Allegan County Medical Society, Allegan, and Ionia-Montcalm County Medical Society, Ionia.

Ralph W. Shook, M.D., Kalamazoo: Cass County Medical Society, Dowagiac, and Eaton County Medical Society, Charlotte.

Arch Walls, M.D., Detroit: Cottage Hospital, Grosse Pointe; Delray General Hospital, Detroit; Mt. Carmel Hospital, Detroit, and Florence Crittenton Hospital, Detroit.

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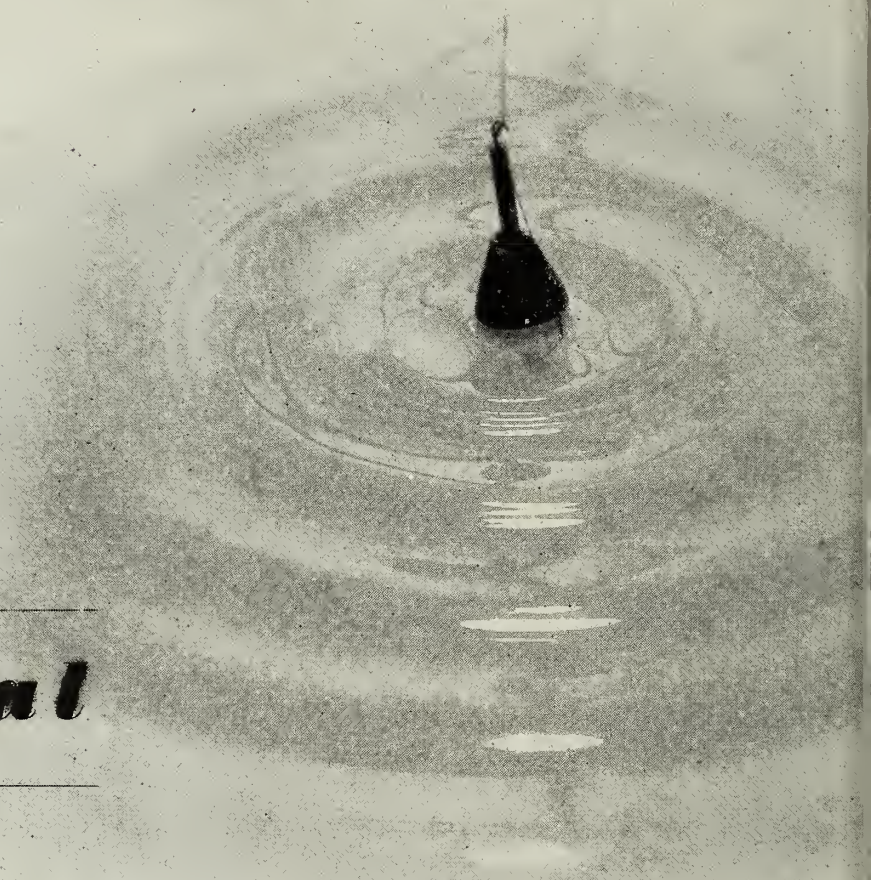
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References: 1. Hollander, F.: Arch. Int. Med. *93:*107 (Jan.) 1954
2. Deutsch, E.: Scientific Exhibit, Gastroscopy, Interim Session A.M.A., St. Louis, December, 1953

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Cancer Comments

The recent plethora of publicity about cancer of the lung has created an enormous number of requests for information in both lay and medical circles with respect to the extent of the problem. In spite of the cigarette controversy or "guilt by association" hypothesis and air pollution factors which may be implicated in the etiology of lung cancer, the medical and epidemiological information available is not sufficient for any conclusions to be drawn. Nevertheless the pulmonary cancer problem as judged by mortality statistics has reached major proportions.

The Michigan Department of Health figures reveal a 12 per cent increase in the number of deaths attributed to primary malignant neoplasms of the trachea, bronchus and lung in the year 1953 as compared to 1952. It is interesting to note, for example, that there will probably be more persons in Michigan dying from primary pulmonary cancer in 1954 than there will be from tuberculosis of the respiratory system. If we can assume a constant annual change in the number of deaths in these diseases similar to the change between 1952 and 1953, and this change is projected into 1955 we can expect approximately 5 deaths from cancer to every three from tuberculosis of the respiratory system. The Michigan Department of Health figures also reveal that 16 per cent of all male cancer deaths in Michigan in 1953 were deaths due to primary neoplasms of the trachea, bronchus and lung. The age distribution of these deaths shows that the overwhelming majority occur in men over 40 years of age.

Since it is generally accepted that pulmonary resection and x-ray therapy are relatively successful in the treatment of early pulmonary cancer, the need for finding cases early becomes quite apparent. Consideration should be given to the inclusion of a chest x-ray as a routine part of the physician's examination of all males over forty years of age. Such other case-finding methods as the routine general hospital admission chest x-ray should also be a productive way to find early cancer of the lung. In the past, mass chest x-ray surveys of the general population conducted by the health departments, tuberculosis associations and in some instances by industry for the industrial population, have discovered an appreciable number of early cases of cancer of the lung in spite of the fact that the survey was made primarily for the purpose of finding previously unknown cases of tuberculosis.

The following table shows the results of eight years' experience in mass chest x-ray survey by the Michigan Department of Health.

SUSPECT NEOPLASMS FOUND FROM CHEST X-RAYS FOR TUBERCULOSIS—JULY, 1946-JUNE, 1954

Total X-Rays	*Number 2,021,335*	*Rate/1,000 Rayed*	*Per Cent of Total Abnormalities*
All abnormalities	57,739	28.5	100.00
Suspect tuberculosis	26,564	13.1	46.00
Suspect neoplasms	1,289	.6	2.23
All other abnormalities	29,886	14.7	51.77

It can be seen from the table that 54 per cent of the suspect abnormalities found were other than tuberculosis, of which 2.23 per cent were suspect neoplasms. Of the abnormalities other than suspect tuberculosis or neoplasms approximately one-half (14,192) were cardiovascular (abnormalities in the size or shape of the cardiac silhouette). All persons with presumptive abnormalities are referred to their family physician for further examinations and diagnosis.

It would seem, then, if further progress is to be made in the early discovery of lung cancer, routine chest x-rays, particularly in males over forty years of age, should be expanded to the greatest possible degree. X-rays of this group included in the physical examinations by physicians in their offices and extension of the routine chest x-rays in general hospital admissions should be considerably more productive in terms of finding early cancer, than the x-ray survey, of the apparently well population, has proven to be.

If the physician is irresolute and administers an ineffectual treatment for skin cancer, it is sometimes too late to accomplish a later cure.

* * *

The ability of a patient to pay should never be a consideration in the treatment of any form of malignant cutaneous lesion.

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AMA Washington Letter

THE MONTH IN WASHINGTON

When the 84th Congress convenes in January, the Eisenhower Administration will press for passage of at least two bills that failed to get through last session, reinsurance and a new program of medical care for military dependents. The former was decisively defeated in the House. The latter did not reach a vote in either chamber.

In a radio address summing up his Administration's legislative achievements, President Eisenhower confirmed that he was prepared to renew the fight next session to have the federal government set up a system for reinsuring health insurance programs. He declared: "Health reinsurance we are going to put before Congress again because we must have a means open to every American family so that they can insure themselves cheaply against the possibility of catastrophe in the medical line."

There have been no indications how far the Administration would go in amending the reinsurance bill to satisfy its critics. It is possible also that if all objectionable features were removed there would be little left of the bill.

At Senate and House hearings, reinsurance was roundly denounced by most witnesses, for a variety of reasons. AMA's position was that reinsurance wasn't needed because private funds are available for the limited amount of reinsurance that could be used, and that in addition the program projected the federal government too far in the direction of control of medical care.

Later in the session, Mr. Eisenhower himself and Mrs. Hobby made every effort to win over critics of reinsurance, and to force the bill through Congress. In the light of these efforts—including a nationwide radio appeal by Mrs. Hobby—the defeat of the bill in the House of Representatives was regarded as one of the most surprising suffered by the Administration on any domestic legislation.

Currently Secretary Hobby and Chairman Charles Wolverton of the House Interstate and Foreign Commerce Committee are attempting to bring together all parties interested in health legislation to see if a compromise can be worked out on reinsurance.

Although the dependent medical care bill wasn't passed, this fact was not in any way regarded as a defeat for Mr. Eisenhower. The bill was offered in the Senate in plenty of time for action, but the introduction of the House bill was held up until Defense Department could estimate the first year's cost, eventually set at $67 million. At any rate, neither Senate nor House Armed Services Committee held hearings on the measure.

In another statement, Mr. Eisenhower made it clear that he expects the next Congress to do something about improving and making more uniform the system of medical care for servicemen's families. Congress, he said, "must eventually meet certain imperative needs of the members of the armed forces." He explained that servicemen now "lack adequate medical care for dependents. . . . It is most important that these needs of the armed forces personnel serving their country often in remote corners of the world engage our serious consideration."

Although the American Medical Association has not had an opportunity to testify on the dependent care plan before Congressional committees, it has made its views known to the Defense Department. In general the AMA is not opposed to Defense Department proposals that a more uniform system be worked out, and that the federal government bear most of the cost. On one important point, however, the recommendations of the department and of the Association are in direct conflict: The department would have the military medical departments themselves furnish dependent medical care wherever they could, with service families going to private physicians and private hospitals only where the uniformed physicians couldn't handle them. The Association, on the other hand, proposes that dependents be cared for by the military medical departments only where civilian medical facilities are inadequate to furnish proper care.

Federal officials, meanwhile, are busy preparing to put into effect the new health bills passed by Congress. Basic state allotment percentages have been worked out for the new Hill-Burton program (for facilities other than complete hospitals) and for the expanded vocational rehabilitation program. The Internal Revenue Bureau is about to issue detailed instructions to taxpayers regarding changes in medical expense deductions and other benefits in the new tax law.

Research that results in better palliation is significant because of the possibility that by becoming very slightly more effective it will be curative.

* * *

Forty to sixty per cent of malignant melanomas of the skin arise in a pre-existent nevus.

* * *

In the whole realm of cancer, no tumor is more deadly than the malignant melanoma.

* * *

Repeated and continued local trauma commonly precedes malignant changes in a nevus.



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PR REPORT

MSMS PR PLANS for the months ahead, and some of the current PR problems facing Medicine from the national viewpoint were tackled in two recent meetings. In the mid-year meeting of the MSMS Public Relations Committee at Flint, means of encouraging county medical societies to step up their PR activities, as outlined in the new MSMS PR manual "Winning Friends for Medicine," held an important place in the discussion. Renewed radio activity, and plans for a series of low-budget TV movies (discussed below) were other items on the agenda of Chairman C. Allen Payne, M.D.

On the national level, MSMS was well represented at the Third Annual AMA Medical Public Relations Institute in Chicago, September 1 and 2. Among the interested participants in the workshop sessions there was Mrs. A. E. Milford, of Ypsilanti, president-elect (now president) of the MSMS Woman's Auxiliary, who believes strongly in the PR responsibilities of the Auxiliary. One highlight of the two-day institute was a session under the chairmanship of Hugh W. Brenneman, MSMS PR Counsel, in which a panel of "experts" outlined some of the emerging PR problems with professional groups which operate in conjunction with, or on the periphery of, the medical profession.

Mrs. Elizabeth Peck, of Detroit, president of the Michigan State Medical Assistants Society, played a key part in another panel discussion.

FIRST IN A SERIES of at least three 13-and-one-half minute movies to be produced by MSMS this fall and winter for television and general use is scheduled for release late in October. It will deal with the career opportunities in the medical associate field, and is designed to be adaptable to various uses. Using television technique "short-cuts" to keep the cost at a minimum, scenes were shot in Bay City and Lansing. The introduction and conclusion feature L. Fernald Foster, M.D., Secretary of MSMS.

The second in the series will be built around a scientific subject, tentatively a better understanding of epilepsy. The third will have a socio-economic theme, probably the limited increase in the cost of medical care in comparison with other family necessities. Co-operation of the University of Michigan Audio-Visual and Television departments in technical matters and production planning was expected to speed completion of the second and third films.

First conceived as a television series, the movies will be filmed in color to make them more attractive for other showings. Upon the success of the first three low-cost movies will depend production of similar future films.

SUCCESS FOR "MEDIC," the new Dow Chemical Co. presentation over the NBC Television network was foreseen by MSMS representatives who viewed a special closed-circuit preview in late August and the kinescope of that preview at the AMA PR Institute. The series promises to be outstanding, thrilling and a strong PR tool for better understanding of the medical profession.

"Medic" is scheduled in Michigan over WWJ-TV, Detroit; WOOD-TV, Grand Rapids; WJIM-TV, Lansing, and WNEM-TV, Bay City.

Watch for two other upcoming TV shows expected to give medicine a boost. The "March of Medicine" series will be back on NBC-TV this season, beginning with a program on mental illness at 5:30 p.m., Sunday, October 31. This will be followed by a special TV report during the AMA Clinical Session in Miami, and a full series in the spring of 1955.

The second show to remember—a one-time presentation—will be "The Doctor" on "Cavalcade of America" at 7:30 p.m., December 7 over ABC. Starring Dean Jagger, the production will show the crises and decisions faced by a middle-aged M.D. during just one day of his practice.

THE MICHIGAN STATE FAIR exhibit of MSMS this year was expected to be the most successful ever when final figures were totaled. A cartoon-type film was used as a "crowd stopper" and a variety of up-to-the-minute pamphlets were distributed to the thousands of interested visitors. A comparative study of the cost of medical care—in easily understood chart form—was added to the 1954 exhibit.

LATEST FILM TO BE ADDED to the AMA library is "A Life to Save." This twenty-eight minute movie tells the story of how a woman's life was saved by her family physician after a quack healer is exposed through the investigative facilities of the local medical societies and the AMA. At present the film is reserved for TV use only, although special color prints are available for preview by medical societies. It will be released later for non-TV appearances.

The five-minute TV film series introduced last year by AMA has now had six new subjects added. Bookings may be made through the MSMS Public Relations Department.

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Editorial Opinion

DIABETES AND PREGNANCY

In the last few years, the relation of diabetes and pregnancy has been the subject of numerous reviews. Observations made in several countries have supplied many thought-provoking facts. The clinical reports concentrate on such things as the management of the pregnant mother and the reduction of fetal mortality. Like the arteriosclerotic complications, the problems of the pregnant diabetic have grown rapidly since the discovery of insulin and the prolonged survival of young women with diabetes. The physiological implications of many of the observations of the last ten to fifteen years are assuming more and more importance. Some of the facts may be put together as follows.

Diabetic women of childbearing age may have children at practically no increase in risk to themselves, provided their diabetes receives good care. There is still a considerably increased fetal wastage. All authorities agree that good management of the diabetes, which probably means good nutrition, must be the physician's first concern. The hormonal response to pregnancy includes a great excess in the production of adrenal cortical hormones, this excess approaching the quantities excreted in Cushing's syndrome (Touchstone, unpublished). However, the adrenal hormones thus measured in blood and urine are essentially the same during pregnancy in diabetic women and normal women. Since normal women have no disturbance of carbohydrate metabolism from these endocrine responses to pregnancy, one assumes that the increased insulin requirement of pregnant diabetics, which commonly amounts to a total of 90 units daily in the third trimester, is the result of an increased demand coupled with their deficiency of insulin. The deficiency of the insulin reserve of the "prediabetic" woman during pregnancy may also be revealed by sugar tolerance tests performed after the fourth month. The prevention of large babies by modern pelvimetry and cesarean section, when indicated, improves the outlook for mother and child. The older, and well-confirmed, studies on the increased frequency of large babies (with birth weight over 10 pounds or 4500 grams) in women destined to become diabetic five to fifteen years later offers a possible opportunity to anticipate the onset of frank diabetes by many years. All authors agree on this increased frequency of large babies in "prediabetics" and an extensive investigation of pregnant women is being undertaken by Dr. Hugh L. C. Wilkerson and his associates of the U. S. Public Health Service in cooperation with the Children's Bureau of the Massachusetts Department of Public Health to see if a new avenue of preventive medicine can be opened.

The experimental and clinical hypotheses of Hoet and others are still young, and much work remains to be done before pregnancy can be viewed in true perspective as a factor predisposing to diabetes in those who already have some form of familial (genetic or developmental) defect. In this difficult area there are many discrepancies and inconsistencies which are not labored here because their resolution demands more investigation rather than editorial ink. In the last analysis, students of diabetes will be grateful to all of the observers who have advanced this approach to the study of a disease whose natural history seems to extend from the patient's grandparents to the patient's grandchildren.—F. D. W. Lukens, M.D., in *Diabetes,* September, 1954.

RESEARCH

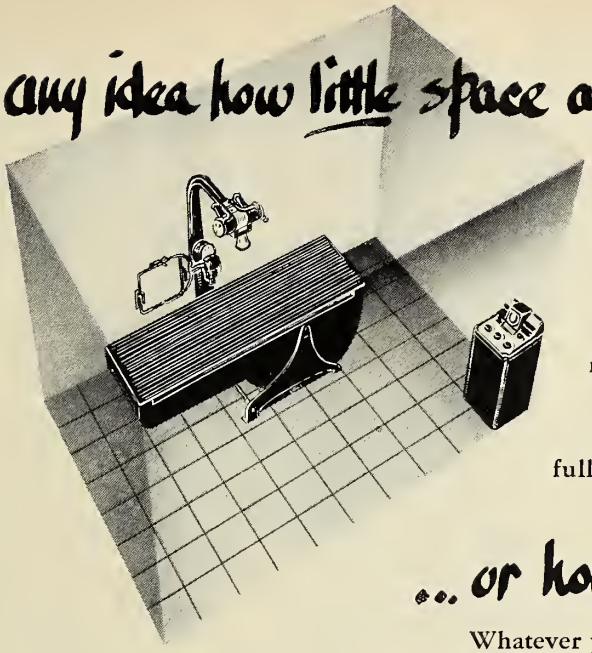
In 1822 the chance discharge of a musket into the body of Alexis St. Martin brought Dr. William Beaumont from the fort on Mackinac Island to attend him. The Army surgeon dressed the wound and returned to his post, not expecting the trapper to survive his injury. But he did and the gastric fistula which resulted became a window from which came an original study of physiology.

It would be untrue to state that William Beaumont was struck immediately with the potentiality for investigation, but sometime in the many months while he dressed the wound and supported St. Martin, the idea *did* come to him, and he began to devise experiments and to record his observations.

One of the major faults of this midpoint of the twentieth century, is the tendency to think of everything in grandiose terms. Research projects seem impossible unless they are conducted in fancy laboratories with extensive budgets. Much of the observation is performed by gears and levers, and nearly all of the conclusions come out of an electronic computing machine.

Certainly the technical literature is cluttered with papers which are full of sound and furv and empty of practical application. Maybe we need more William Beaumonts to whom research was an evolution from clinical observation. — William Bromme, M.D., in *Woman's Hospital News Bulletin,* August, 1954.

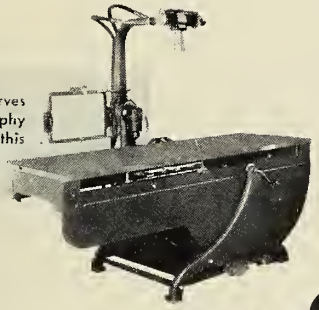
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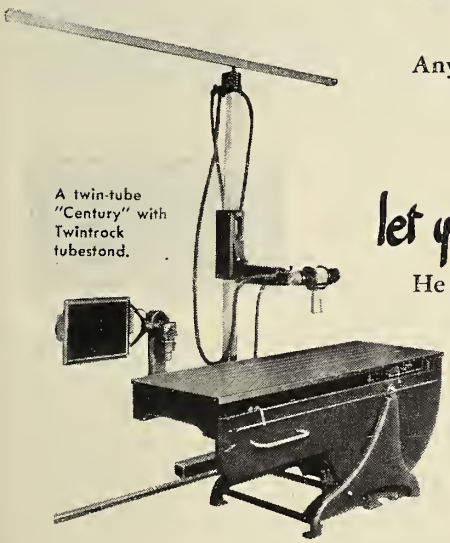
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Revolutionary "MEDIC" by Dow

Four and one-half years of hard work and faith in an idea was consummated on September 13 when television's most revolutionary new program MEDIC, went on the NBC network, sponsored by The Dow Chemical Company of Midland, Michigan.

Parent of the idea of this startingly different show is Jim Moser, original writer of the "Dragnet" series, who literally has lived in Los Angeles hospitals since 1952, gathering real life material for MEDIC. Because of his passion for authenticity, the exhaustive research he has done in the field of medicine and the valid premises on which the show is built, the Los Angeles Medical Association has extended its official approval to MEDIC and has been supported in this move by the approbation of the American Medical Association.

The program will have no single character running through it. Instead, Medicine becomes the personality. Through the various doctor-patient dramas, the show will touch on all phases of life, all types of stories, both historical and contemporary.

The series will not only be documentary in treatment and actual in fact; it will be filmed on real-life locations rather than a sound stage. Hospitals, clinics, doctors' offices and private homes will be used as settings for the drama.

Because Moser believes that "to get acquainted with a subject, like an individual, you must know the background"— approximately two out of every thirteen scripts will deal with incidents in medical history. The assassination of Lincoln and his subsequent medical treatment will be the subject of one show. An incident in the life of Louis Pasteur is planned for another. Moser hopes they will be able to make a film aboard a Navy hospital ship or in an Army hospital. For the pilot film this new production team of Jim Moser and Tony Miner entrusted the direction to Bernard Girard, who for many months had worked closely with Moser on the development of the series. In the pilot film they chose a singularly daring subject. The film, almost entirely photographed in the Los Angeles County Hospital, dramatizes the story of a young expectant mother whose doctor discovers she has a fatal case of leukemia. The girl, who has waited seven years for a child, is informed of this tragic news by her husband and the remainder of the story is carried breathlessly along by her desperate fight to live long enough for her baby's birth.

With almost unbearable intimacy, this absorbing drama achieves a raw, documentary realism. A nerve-tightening scene showing the delivery of the child was filmed at an actual operation, and carries through to the cutting of the umbilical cord. The newly born baby actually cries on cue in the drama's crucial scene, offering audible evidence that it will live in spite of its mother's death. The crew waited through six births to get these shots.

Besides the intimate personal story of this film, a doctor's struggle to save a child's life is brought into full view. His knowledge and technique, his devotion to his profession, and his human understanding are all brought into play to give the viewer a ready comprehension of the medical solution to a grave problem. In this, the film achieves its most desired effect . . . the coupling of entertainment with the presentation of authenticated information.

MEDIC will touch frequently on the "art" phase of medicine. By acquainting the public with the doctor of today, many among the viewing audience will get an understanding of the complex, highly specialized field that forms the very matrix of life and death. Modern methods of diagnosis, surgery, psychosomatic medicine, preventive care and laboratory testing all will be included.

EXPANDING GROUP INSURANCE

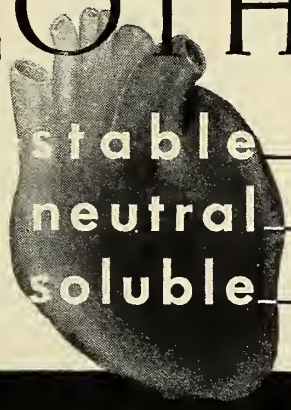
A three-fold expansion of group insurance protection for American families has taken place since the end of World War II. Almost 34 million persons are now covered, primarily for benefits for hospital and surgical care. Major medical expense coverage, the newest type of group insurance, now protects some 1.1 million individuals under 700 master contracts. It has had the most rapid rate of growth of all group insurance plans.

On a nationwide basis, health insurance plans have enrolled about 60 per cent of the population, providing some form of protection against future hospital expenses for some 100 million Americans. Over 75 million have insurance against surgical bills, and nearly 40 million have coverage for doctors' calls.—Research Council for Economic Security, August, 1954.

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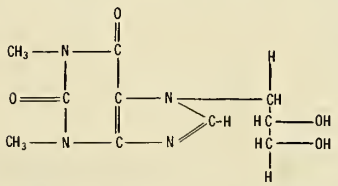
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VOLUME 53 OCTOBER, 1954 NUMBER 10

Therapy of Diabetes— Modern Concepts

By Edwin L. Rippy, M.D.

Dallas, Texas

IN 1870, A. Trousseau was lecturing to a medical class in Paris. He was presenting a patient, a thirty-six-year-old man obviously afflicted with severe symptomatic diabetes in early acidosis. In the courtly style of the day he remarked: "Gentlemen, his glycosuria is of a bad kind, against which medical treatment cannot prevail. Whatever I do the disease will resist my efforts . . . and ultimately prove fatal."

He described another case: "I prescribed 10 grains of levegated chalk to be taken daily . . . a restorative diet . . . the inhalation of oxygen . . . he died two days after this."

Sir William Osler, in his textbook of 1892, stated: "In children the disease (diabetes) is rapidly progressive and may prove fatal in a few days." He added: ". . . no drug appears to have a directly curative influence. Opium alone stands the test of experience as a remedy capable of limiting the progress of the disease."

These attitudes, expressed by the most astute medical thinkers of their day, seem antiquated in the light of present knowledge. It is now well known to informed laymen and physicians alike that this morbid picture has miraculously changed for the better. The diabetic of today has the privilege of enjoying almost normal life expectancy, but only if modern proven concepts of early detection, adequate diet, proper insulin and supplementary treatments of value are utilized intelligently. Without exception, it is the obligation of the conscientious physician to see that the public, and his patient in particular, are taught these facts.

Modern therapy of diabetes involves many tried and proven principles, a great deal of judgment and some tricks. A doctor, a specialist in diabetes, once very aptly almost disappointed an anxious patient by saying: "You were misinformed. I don't treat diabetes, but I will teach you to treat it!"

An approach to the treatment of diabetes may well be considered under the following headings: (1) the attitude of the physician, (2) the attitude of the patient, (3) the regulated eating program—diet, (4) the choice and application of an appropriate insulin.

Attitude of the Physician

The physician must not only be master of the known physiological facts and their clinical application but must be tempermentally equipped with the patience to cope with this tedious disorder and the often perverse personality of the diabetic patient. He must have a knack of persuasion, impression and instruction and a zeal to sell the concept of good control. All too often diabetics have been introduced poorly to their life-long tussle by learned, but un-indoctrinated, doctors, and the resultant premature complications are a poor testimonial. The physician has a profound obligation in aiding his patient in the beginning in developing a favorable attitude and should use studied techniques to this end.

Attitude of the Patient

Von Noorden once described the diabetic as "a pessimist who takes pleasure in brooding over his fate, doubts his future, and thereby loses his enjoyment of the present." This attitude was perhaps understandable in those days, but is now unjusti-

fied, though with variations still encountered. Unless the patient can be taught to accept philosophically the necessary self-discipline of being a diabetic and assume a favorable attitude toward his disorder, then all the scientific facts now available will be of no benefit and he will proceed inevitably to the "precocious senility" and premature death that is the penalty of the poorly controlled diabetic.

People of all ages and all temperaments develop diabetes; some are quite capable of making necessary adjustments to a regimented mode of living; others are less well endowed and need constant encouragement. Some, unfortunately, lack the ability to adapt to any restrictions and eventually suffer accordingly. All patients do better if under the continuous periodic care of a physician.

Regulated Eating Program—Diet

The diet of the diabetic of today is actually the normal diet for the specific individual, minus concentrated sweets. The diet formula is dictated by the patient's sex, age, activity and present state of nutrition. It is to be emphasized that the diet is determined only by the need of the patient and should not be modified simply to keep the patient off insulin. All patients should be on a "formal" measured diet; there is no place for the so-called "free diet". It is the obligation of the physician to create the "diet formula" and, if possible, to have a dietitian translate this into a master menu which she will present and explain to the patient. The patient may often assist in the preparation of his own diet, which should be adequate in quantity, variable in quality and to his liking. The old theory of teaching a diabetic to curb his appetite and remain as lean as practicable is still tenable.

Developing the diet formula is relatively simple and can be done in this fashion:

1. Figure the optimum number of calories to maintain, or attain, normal weight. In general, maintenance diets for women average 1800 to 2000 calories; for men 2200 to 2500 calories. A good diabetic reduction diet for women is about 1250 calories and for men 1,500 calories. Children require approximately 1000 calories plus 100 for each year of life.

2. Next, establish the daily protein allotment. Adults need .66 to 1.5 gms. per kilogram of weight. Children require 2 to 3 gms. or more, per kilogram of weight. Protein is an essential food, a good food and is liver protective. It is metabolized into glucose slowly and works well with modified insulins. From seventy to 120 grams per day are usually allowed.

3. Next, figure a "middle-of-the-road" carbohydrate allowance which may range from 150 to 250 grams daily, depending on such factors as severity of diabetes, the patient's wishes and total calories allowable.

4. Finally, add fat to provide the proposed number of calories. Most desirable are vegetable fats, dairy fats, and animal fats, in the order named, to keep the diet low in cholesterol.

For those not in a position to individualize the diet, the meal plans formulated by the American Diabetes Association, the American Dietetic Association, and the United States Public Health Service, utilizing the "exchange system", are satisfactory.

The patient must be taught from the onset to eat regularly, and in order to achieve balanced control, carefully follow the distribution of the diet as prescribed, which in turn will be dictated by the timing of the insulin to be used.

Recommendations for the distribution of the diet to accommodate modified insulins follow:

INSULIN	BREAKFAST	LUNCH	AFTERNOON SNACK	SUPPER	BEDTIME SNACK
NPH	1/5	2/5	Yes	2/5	?Yes
Lente	1/5	2/5	Yes	2/5	?Yes
Protamine	1/5	2/5		2/5	Yes
Globin	1/3	1/3	Yes	1/3	

The average snack should be approximately P-10, CHO-20, F-10, and is to be subtracted from the daily total before the meals are distributed. The above distributions may have to be modified to fit individual needs, based on before meal and bedtime urinalyses. Usually a pattern of glycosuria and/or reactions will develop which will guide such changes.

Though some prefer to start with small diets and gradually increase them, it is entirely satisfactory to place the patient on his full and final diet at the onset of treatment. The creation of the diet is the first step in control of the diabetes and in approximately 30 per cent of patients it may be the only step, insulin not being required. Though there are no fast rules as to which patients can fulfill the criteria of control on diet alone, they will usually fall into the following group:

1. Mild diabetics, usually over forty and diagnosed early.

2. Diabetics who are grossly overweight and who are willing to reduce to normal by restricting food intake; this often modifies or even reverses the diabetic state temporarily or even permanently.

3. Diabetics, either normal in weight or excessive, who have been abnormal carbohydrate eaters and who are willing to drastically reduce this element of the diet.

4. Mild diabetics, diagnosed early, who are well controlled on diet and a small amount of insulin may occasionally be able to discontinue insulin as their condition improves.

Conversely, it is usually not difficult to determine initially those patients who will need insulin and valuable time may be saved by starting insulin without delay. Insulin is usually indicated in the following type patients: (1) always in children, adolescence and youth, (2) those under forty years of age, (3) those presenting on diagnosis the classic symptoms of excessive appetite, weight loss, polydipsia, and polyuria, (4) those having fasting blood sugars (Folin-Wu) of 200 mgm. per cent or over, (5) those showing ketonuria and/or persistent glycosuria, (6) underweight patients needing ample diets.

Patients should be urged to avail themselves of insulin early if needed. It is the only true antidiabetogenic factor known and the body's most powerful anabolic hormone. Fortunately, there is a variety of good modified insulins available, varying only in timing (onset, peak, and duration of absorption). There are some minor differences of opinion among qualified physicians as to the utilization of these insulin combinations, but one concept that may aid in the choice of the best insulin for the specific situation follows:

1. Unmodified (Regular) Insulin in acidosis and coma where rapid absorption is essential; during infections when glucose tolerance is decreased; as a supplement to longer acting insulins.

2. Protamine Zinc Insulin (PZI) in mild to moderately severe diabetics whose daily insulin need does not exceed 40 units; in physically active patients; in older diabetics.

3. Globin Insulin in mild diabetics who are capable of producing relatively normal fasting blood sugars but are glycosuric after meals and whose insulin need does not exceed 30 units a day.

4. NPH Insulin in young diabetics; severe diabetics regardless of dosage needed.

5. Lente (70-30) Insulin in approximately same indications as NPH, perhaps a little smoother in absorption.

It is desirable to control the patient on a single morning injection of the appropriate insulin, altering the distribution of the food to fit the absorption of the insulin. "Freaky" insulin regimes are to be avoided. The addition of Regular insulin to the morning NPH or Lente is acceptable and its use as a supplement before lunch and/or supper is good practice if such is entirely necessary. There have been some good reports with NPH and Globin in which ⅔ of the daily dose is given before breakfast and ⅓ before supper. Some continue to use the "prepared on the spot" insulin mixture of 1 part PZI and 2 parts Regular, though the result is approximately that of NPH.

After the severity of the diabetes has been evaluated, the diet developed and the eventual insulin chosen, there are several ways to initiate insulin therapy. If there are no ketones present, then one may proceed leisurely because the patient will literally begin to improve after the first injection of insulin. Basic control may be established under a hospital regime in seven to ten days but may be accomplished equally well in an office well organized for the care of diabetics.

The following rules are suggested for the initiation of insulin therapy:

1. In mild diabetics: After placing on appropriate diet with proper distribution of food to fit the chosen modified insulin, start with morning injection of a safe dose of 10 to 20 units. Increase dosage by approximately 2 units every three to four days until t.i.d. a.c. and h.s. urines begin to clear of sugar; then double check with fasting and mid-afternoon blood sugars.

2. In more severe diabetics one may either use the above plan starting with a larger morning dose of 30-40 units and gradually increasing dosage or

3. Another practical method is the use of "insulin on demand" (also useful during infections, illnesses, post operative, et cetera). Check urine specimens for sugar before each meal and bedtime (perhaps once in the night if glycosuria is heavy) and give Regular insulin each time as follows:

If urine sugar is ++++	give 20 units
If urine sugar is +++	give 15 units
If urine sugar is ++	give 10 units
If urine sugar is +	give 5 units
If urine is negative	give none

This may be modified in children to a schedule of 16-12-8-4 units. After three to four days when insulin need appears to be stabilizing, discontinue the above regime and give modified insulin of your choice in the morning in a dose approximately ¾ that of the total Regular insulin needed on the last day. Adjustments, thereafter, can be made as above indicated.

As a rule, insulin need will be relatively high in the beginning but as tolerance increases, the dosage may be gradually reduced and will soon level off. This is important to remember and should

be done routinely as urine specimens become negative in order to avoid resultant hypoglycemic shocks. It will take approximately four to six weeks for the average diabetic to become stabilized. Obviously, if a diabetic presents incipient acidosis, the approach with insulin therapy must be much more vigorous.

Though the insulin need in diabetes is highly variable, the average dosage required in various age groups (to serve as a guide) follows:

Infants, 0-3 years, highly sensitive	2- 10 units
Children, 3-12 years, not too difficult to control	10- 30 units
Adolescents, 12-20 years, erratic, brittle	50-120 units
Young adults, 20-35 years, variable	30- 90 units
Middle age, 35-55 years, more stable	30- 60 units
Senile, 55+ years, usually stable	10- 40 units

The amount of insulin needed varies with the age of onset of diabetes. A patient of forty who has had diabetes twenty-five years may require 70-80 units; whereas if the onset of his diabetes was of recent date, he might require only 30-50 units. There are obviously exceptions to the above figures.

Until more is known regarding the cause of complications in diabetes, the physician is obligated to be a strict disciplinarian and to teach— and preach—to his patient the necessity for, and the means to achieve, optimum control. "Symptomatic" control is easily accomplished but unless "survival" control is attained, diabetic therapy is a poor irony.

It is well to review the criteria of good control:

1. The patient's diet should be such as to attain and maintain normal weight.
2. The patient should feel well and have no symptoms referrable to diabetes *per se*.
3. Fasting blood sugars should be in the upper limits of normal or slightly above (ideally not over 140 mgm. per cent/100 cc blood Folin-Wu).
4. The urine should be mostly aglycosuric.
5. There should be no ketonuria.
6. There should be no hypoglycemic shocks.

There are a few miscellaneous facts worth mentioning. The diabetic is a good candidate for supplementary vitamins, particularly Vitamin B. The older diabetic with neuritis does well on massive B_{12} injections which he can give himself. Until there is further clarification of fat and its possible relationship to atherosclerosis, the diet should be as low in cholesterol foods as practical. Whether or not lipotropic substances are helpful is not definitely known. It is suggested they may be used in severe diabetics and old diabetics.

The patient, after initiation of treatment, is on the "long stretch" of life-long care and should be seen by his physician at periodic intervals. He should be taught to do urinalyses one to four times a day, before meals and bedtime, depending on the severity of his condition. He should be taught the pitfalls and hazards of his disease and its control measures. For instance, he will find that emotional upsets often produce glycosuria and may even induce true acidosis, in spite of his adherence to his routine control measures. He must be taught that dread acidosis is an entirely preventable complication and may be aborted by proper measures if his urine studies for glucose or ketones indicate its onset. He will find that exercise tends to lower blood sugars and that shock may be avoided by extra food or less insulin. He may be surprised to find that diabetes is not a static condition but tends to vary in sensitivity of control—a poorly controlled patient requiring gradual increases in insulin and a well-controlled patient being able to do well on minimal doses, depending on age. He will learn that it is better to live openly with his diabetes than to be secretive. The more he knows about his disorder, the easier it will be to live with it.

It is perhaps a mistake to teach a patient that he can live life "as usual" with diabetes, because he will find that untrue. On the other hand, he should be taught to accept, with a grateful heart, life-saving present-day control measures. He will be justified in looking to the future with the optimistic hope that further advances will be made in his behalf.

3622 Fairmount

In lung cancer it is now recognized that cough, chest pain, wheezing, expectoration, and loss of weight are manifestations of a late lesion.

* * *

The incidence of gastric cancer is significantly greater among the relatives of gastric cancer patients than in the general population.

Malignant melanoma is commonest in blond and sandy-haired individuals.

* * *

Today, cancer kills far more children than measles, diphtheria, whooping cough, poliomyelitis, and many other childhood diseases.

Co-existence of Hypothyroidism with Diabetes Mellitus

By Crosby D. Eaton, M.D.

Detroit, Michigan

IN MICHIGAN, with the rest of the Great Lakes area, we are familiar with the fact that we are in the so-called goitre area of the United States. The vast majority of goitre occurring in this area is of the simple colloid type. This is frequently accompanied by deficiency of thyroxin production with resulting hypothyroidism of greater or lesser degree. A low metabolism may also be present with the nontoxic adenomas of later life.

The symptoms of hypothyroidism are familiar but will be listed briefly: (1) fatigue, sleepiness, (2) dry skin, hair, mucous membranes, brittle nails, (3) numbness, tingling of hands and feet. Cramping of muscles, particularly those of the legs while at rest, (4) susceptibility to cold, chilliness, cold hands and feet, (5) nervousness, irritability, inability to concentrate the mind, (6) constipation, (7) nasal congestion as a result of swollen mucous membranes. This sometimes produces headache of the sinus type, (8) menstrual disorders, particularly a shortened cycle.

The physical signs in addition to the dry skin and hair, are: (1) subnormal body temperature, (2) slow pulse, (3) low pulse pressure, (4) myxedema when present. The laboratory findings are a low metabolic rate, high blood cholesterol. A low up-take of radioactive iodine is also found.

It is to be noticed that some of the symptoms of hypothyroidism are similar to those of diabetes: fatigue, sleepiness, dry skin, hair and mucous membranes, constipation and paresthesias. It is not uncommon to bring a case of diabetes under good control and yet have the above symptoms persist. The incidence of hypothyroidism among diabetics is as high or higher than that among non-diabetics and produces the same picture.

It has been known that toxic goitre, particularly Graves' Disease, increases the severity of diabetes and, from this, it was formerly thought that the administration of thyroid to a diabetic would make his disease more severe. This does not occur, provided the dosage is regulated to maintain a normal metabolic rate.

In the Grace Hospital out-patient department and among private cases, thyroid has been administered to several hundred diabetics with no effect upon diabetic control. These cases include patients of all ages from childhood to old age and all degrees of severity of the diabetes. The results of this therapy are the same as in the non-diabetic as would be expected. The fatigue is relieved, the hair and skin become normal and the other symptoms abate or disappear.

There are other reasons for thyroid therapy, when indicated, in diabetic patients:

1. By improving circulation and shrinking the mucous membranes of the upper respiratory tract, resistance to the common cold is increased. Many patients who have been subject to repeated colds find that they have only one or two a year under thyroid therapy. The tendency to furunculosis is also lessened.

2. The tendency to arterial thrombosis is lessened by improving the arterial circulation inasmuch as thrombosis is most apt to occur when the circulation is depressed.

3. Circulation to the extremities, particularly the feet, is improved, probably helping to lessen the probability of gangrene, particularly among older patients or those with long-standing diabetes with arteriosclerosis.

Summary

It may be said that thyroid administration to diabetics, who are hypothyroid, has the same beneficial effects as upon non-diabetics. It has no effect, either beneficial or adversely, upon the control of the diabetes. By lessening the occurrence of colds and other infections were the tendency to vascular accidents and gangrene, it is particularly beneficial to the diabetic patient.

462 Fisher Building

The incidence of cancer of the cervix is higher in Caucasians than in Negroes, while the reverse is true of cancer of the body of the uterus.

* * *

Cancer occurs in every type of vertebrate and all multicellular organisms.

The best evidence indicates that cancer is not a disease of civilization.

* * *

Cancer can and does occur at any age, and youth is no protection against its development.

Management of the Diabetic Patient with Heart Disease

By I. Donald Fagin, M.D. and
Julian M. Guidot, M.D.

Detroit, Michigan

DIABETES MELLITUS predisposes to earlier onset, increased frequency, and increased severity of arteriosclerotic disorders, and reduces the relative protection otherwise enjoyed by women against arteriosclerotic heart disease. Hypertension is also commonly associated with diabetes. Diabetes affords no protection against rheumatic or luetic or other etiologic categories of heart disease which may be coincidental; thus, the diabetic patient with heart disease is a common problem to the practitioner. In most instances, the problem is not a difficult one, and the principles of management of diabetes and of the heart ailment dovetail nicely. However, in an occasional case, the principles of treatment of each appear to be diametrically opposed.

In a twelve-month period ending February 28, 1954, there were 345 admisions of patients with diabetes mellitus to Mount Carmel Mercy Hospital. Ninety of these admissions (26 per cent) were of patients having heart disease as well as diabetes. Four of these patients were admitted twice during the year, so our total number of diabetic cardiac patients was eighty-six. The diabetes varied in severity from asymptomatic hyperglycemia to severe ketosis. The heart disease ranged from asymptomatic electrocardiographic changes (e.g., ECG evidence of old infarction) or roentgenologic abnormalities (e.g., enlarged heart) to acute myocardial infarction complicated by arrhythmias and congestive failure.

Cardiac complaints were the reason for admission in fifty-four instances, while seven admissions were for diabetic management. The remaining twenty-nine admissions were primarily for other coincidental difficulties, including infections, surgical emergencies, cerebrovascular accidents, and peripheral vascular disease. These eighty-six diabetic cardiac patients consisted of thirty-nine men and forty-seven women. The average age of the men was 59.5 years (range, 45-73) and of the women, 64.5 years (range, 50-73). The major cardiac diagnoses in these patients were as follows:

Rheumatic heart disease	2
Asymptomatic	1
Congestive failure	1
Hypertensive heart disease	20
Asymptomatic	12
Congestive failure	8
Hypertensive and arteriosclerotic heart disease	16
Asymptomatic	2
Anginal syndrome	3
Acute coronary thrombosis	5
Congestive failure	6
Arteriosclerotic heart disease	48
Asymptomatic (including old infarctions)	8
Anginal syndrome	7
Acute coronary thrombosis	20
Congestive failure	12
Paroxysmal ventricular tachycardia	1

Of this group of eighty-six hospitalized diabetic cardiacs, seventy-two patients (84 per cent) presented no major problem in diabetic management; i.e., hyperglycemia and ketonuria were either absent or controlled early and without difficulty. In fourteen patients (16 per cent) moderate to severe ketosis complicated the clinical picture, in six instances being of such severity that the metabolic derangement constituted an immediate threat to life. In these fourteen patients, the breakdown in diabetic control was associated with coronary thrombosis in seven cases, with congestive failure in two, and with other complicating factors such as infection or cerebrovascular accidents in five. Thus, although the number of cardiacs in whom the uncontrolled diabetes posed a serious problem is small, any moderately large general hospital will encounter several such cases each year.

Nineteen of the eighty-six patients died: seven of coronary thrombosis (including 2 cardiac ruptures); eight of congestive failure; three of cerebrovascular accidents; and one of gangrene of a leg. None of the deaths in this series was attributable to diabetic acidosis or electrolyte imbalance.

Using our review of this series as a background, we should like to discuss briefly the management of the diabetic patient with heart disease.

A few comments regarding the cardiovascular effects of insulin are pertinent. In dosage sufficient to produce hypoglycemia, insulin may cause an increase in heart rate, in venous pressure, in systolic blood pressure, in stroke volume, and thus in car-

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diac output and cardiac work. Arrhythmias and minor electrocardiographic changes may also be noted. These objective manifestations of insulin overdosage, together with the pallor and sweating which accompany them, and the subjective sensation of jitteriness, are srikingly similar to the effects of an injection of adrenalin. Some current evidence suggests that the cardiovascular responses to insulin hypoglycemia may be secondary to a discharge of epinephrine from the adrenal medulla plus stimulation of the cardiac sympathetic nerves, rather than to any direct action of the insulin or the lowered blood sugar on the heart. Insulin overdosage has been known to precipitate anginal pain, myocardial infarction, acute pulmonary edema, and congestive heart failure. Thus, insulin, the most important element in the treatment of diabetes, when used injudiciously, can cause acute cardiac complications in a susceptible heart.

On the other hand, just as over-treatment with insulin may lead to cardiac complications, so also may undertreatment. The patient whose diabetes is poorly controlled is less able to tolerate ordinary cardiac stresses and if coronary sclerosis and/or hypertension is present, this patient may develop angina or other symptoms of cardiac insufficiency which may improve when the diabetes is controlled. The dehydration, hemoconcentration, decreased circulating blood volume, and shock which accompany severe diabetic acidosis are excellent predisposing factors for the development of thrombosis in sclerotic coronary vessels, and it may be difficult in some cases to determine whether a coronary thrombosis was the result or the cause of diabetic acidosis.

We may now take up some of the categories of heart disease which are likely to be encountered in diabetic patients, particularly arteriosclerotic and/or hypertensive heart disease with angina pectoris, myocardial infarction, or congestive failure. There is no direct etiologic relationship between diabetes and predisposition to rheumatic heart disease, except perhaps insofar as the uncontrolled diabetic is susceptible to streptococcal infections. Inactive valvular scarring in the absence of cardiac insufficiency presents no problem with respect to coincident diabetes. Acute rheumatic carditis with or without congestive failure, if it occurs in a diabetic, is liable to occur in the young diabetic who is notoriously more labile with respect to his blood sugar than his adult counterpart. It must be treated as any acute infection in the diabetic. The caloric value of the diet and its protein and carbohydrate content should be increased to compensate for the increased tissue breakdown resulting from fever and increased metabolic rate. Insulin dosage should be increased to prevent ketosis. The patients in this age group are usually fairly severe diabetics and may present problems in management even without the superimposed infections. However, the number of so-called "brittle" diabetics the physician encounters varies inversely with the amount of detail and industry he uses in controlling his patients. Most of these patients can be controlled with a dose of protamine zinc insulin plus one additional dose of regular or intermediate insulin prior to a meal or at bedtime, depending on the time glycosuria is severe. Often a dose of intermediate (globin or NPH) insulin in the morning and a smaller dose with the evening meal are all that will be necessary for adequate control in these severe diabetics. Urines should be tested for sugar at least four times daily at the usual intervals. Hospitalization of these patients is convenient for the physician, but because of their usually tender years, the emotional impact of separation from their families and the chronicity of the rheumatic state, the in-patient stay should be as brief as possible. If ACTH or cortisone is used as supplemental therapy, the diabetogenic effects of these hormones must be understood thoroughly and it must be anticipated that the insulin requirement will increase. In addition, the problems of associated salt retention and potassium loss may complicate the diabetes. The management of congestive heart failure developing in a diabetic with rheumatic heart disease presents problems of fluid and electrolyte balance which will be mentioned later. In this series, we had two patients with inactive rheumatic valvulitis, of whom one had congestive heart failure.

The most common problem we encounter in office practice in this field is the middle-aged or elderly diabetic with angina pectoris, although only ten patients in this group were hospitalized with this complaint. Even though the glycogen of the myocardium is well protected and ordinarily is not depleted by minor hypoglycemic episodes, we have mentioned that insulin overdosage may produce anginal pain. But inadequate diabetic control may also increase the frequency and severity of anginal attacks; therefore, very careful adjustment of diet and insulin is essential here. The usual treatment of angina with modified activity,

elimination of precipitating causes, nitroglycerine, and other measures, of course, remains the same. Caloric restriction for dietary weight reduction is particularly gratifying in obese patients in this category. The anginal pain and the clinical evidences of diabetes may subside and even apparently disappear *pari passu* with a satisfactory weight loss.

Diabetics with angina who are initially underweight are usually more severly afflicted with either or both of these disorders. Moderation in the diabetic management of these patients is advisable and too rigid control is risky. It is safer when these patients spill a little sugar occasionally; their fasting blood sugars should range between 110 and 150 mgm. per 100 cc., and they should be kept from bouncing about too vigorously for reasons already recounted, and because we cannot exclude the possibility that a *mild* hyperglycemia may contribute to optimal myocardial metabolism in the presence of a reduced coronary blood flow. These patients are best handled with a diet of high carbohydrate content (175-250 gm daily). Quantitative determination of the amount of sugar in a twenty-four hour urine specimen has served us as a very useful guide to insulin dosage. In the absence of acidosis, and after a trial of dietary measures alone, we usually prescribe protamine zinc insulin in initial dosage of 1 unit for every 1.5-2 gm of sugar excreted in 24 hours. Whenever practicable, we prefer that this insulin be administered at night before the patient retires so that if he is going to have a hypoglycemic reaction, he is more likely to have it the next morning or afternoon when he is wide awake and able to recognize and counteract it immediately. These precautions probably are advisable in all elderly diabetics, since we are justified in assuming the existence of coronary sclerosis in these patients and in attempting to prevent sharp decreases in blood sugar by excessive insulin or insufficient dietary carbohydrate.

Acute coronary thrombosis in a diabetic patient may pose a major diagnostic and therapeutic problem: it occurred in twenty-five patients in this series and was associated with moderate to severe ketosis in seven. As noted above, acidosis may be a cause or an effect of the thrombosis. The infarction is often, as in non-diabetics, the first intimation of heart disease. It may be painless and be overshadowed by the metabolic crisis which it precipitates in the diabetic state. An unexplained loss of control in a previously stabilized diabetic of susceptible age should prompt search for a "silent" infarct. There was one such instance in this series. Electrocardiographic changes diagnostic of infarction may be delayed for several days, and the early electrocardiograms may be normal. On the other hand, patients without heart disease recovering from severe diabetic acidosis may show ECG abnormalities secondary to hypopotassemia (ST segment shifts, T wave inversion, fusion of T and U waves, changes in conduction, etc.). The ST and T changes may simulate those of myocardial ischemia associated with coronary insufficiency although these electrolytically determined changes revert to normal with correction of the imbalance. Thus, the ECG may be normal in the first few days following coronary thrombosis and may be abnormal in recovery from acidosis without coronary thrombosis.

The blood sugars and urines may also be confusing. Some patients with coronary thrombosis and no background of diabetes will show mild glycosuria for the first twelve to twenty-four hours following the acute cardiac episode and may have a fasting blood sugar of 120 to 150 mgm. per 100 cc. in the morning after entry. If vomiting has been part of the clinical picture, these patients may also exhibit acetonuria. The glycosuria and hyperglycemia subside within a few hours and subsequent glucose tolerance curves may be normal. Some endocrinologists believe these patients are subclinical or latent diabetics whose compensatory homeostatic mechanisms break down under the strain of the cardiac episode. Others believe this temporary metabolic disturbance represents a stress response due to liberation of adrenalin and glucocorticoids following the intense physical and psychic trauma of the cardiac insult.

The metabolic response of the true diabetic to myocardial infarction varies with the severity of the diabetes, the severity of the infarct, the adequacy of previous control, and the presence or absence of additional complications. A mild diabetic with a clinically mild infarct may meet the cardiac crisis with barely a ripple in the degree of diabetic control. On the other hand, acidosis and coma may supervene rapidly following coronary thrombosis. Circulatory collapse with tachycardia, hypotension, cold clammy skin, and stupor may be due to the diabetic acidosis or the infarction. Respiration may be shallow or deep depending on the degree of acidosis. The clinical features in these desperately ill patients represent the combined effects of the

heart lesion and the metabolic derangement. It is essential to evaluate these two factors in their proper proportions since the treatment depends on which factor is most responsible. The dehydration, hemoconcentration, and salt depletion of diabetic acidosis call for rapid administration of fluid, electrolytes, and insulin. However, the precarious state of the myocardium dictates caution in the administration of fluids, salt, and insulin. Proper appraisal depends on clinical judgment plus laboratory aid. There is no need to reiterate here the usual principles of management of diabetic acidosis or coma except to note that these must be modified depending on the exigencies of the cardiac state. An indwelling catheter facilitates frequent (hourly) urinalysis for sugar and ketone bodies. Determinations of blood sugar, CO_2—combining power, and serum sodium chloride and potassium are most helpful as guides to efficacy of therapy and aid in early recognition of electrolytic imbalances which may be fatal in patients who seem to be recovering satisfactorily as far as hyperglycemia and ketonuria are concerned.

To avoid overburdening the circulation with excessive intravenous loads, oral intake of fluid and electrolytes should be encouraged vigorously if the patient is conscious and not vomiting. Where the intravenous route must be used, careful observation of the neck veins, repeated measurements of the venous pressure, and frequent auscultation of the lung bases will help in detecting early signs of failure.

Polemics regarding the advisability of using glucose as well as saline in instituting therapy have occupied the academicians for the past decade. In diabetic acidosis not associated with heart disease we follow the middle of the road policy of not using glucose for the first six to eight hours, or at least until a falling blood sugar indicates that carbohydrate is again being metabolized. However, in the patient with a myocardial infarct who is receiving massive doses of insulin, we believe it is wiser to protect him against sudden drops in blood sugar by administering glucose plus saline from the onset of treatment. Reports that such early administration of glucose tends to increase the incidence of hypoglycemia are countered by other reports indicating no difference in incidence.

During the period when shock is severe, the absorption of insulin from subcutaneous injection is delayed and intravenous insulin is advisable. The peripheral circulatory collapse may also militate against subcutaneous administration of fluids which ordinarily would provide a safety valve against suddenly overloading the circulation.

Treatment of the cardiac emergency follows the usual principles of rest, oxygen, analgesics, plus antihypotensive agents and anticoagulants where indicated. Morphine, otherwise the drug of choice for pain relief, has some minor disadvantages in diabetic acidosis. Its propensity for inducing vomiting in some patients may complicate therapy. The emetic effect is reduced by using atropine in conjunction with the morphine and also by the use of smaller doses repeated at more frequent intervals. Intravenous administration of 8 mgm. doses of morphine may be sufficient to control pain. The other possible disadvantage of morphine is its mild anti-diuretic effect. Neither of these disadvantages is of major signficance, but they can be avoided by the use of other analgesics readily available.

For the successful management of a patient with coronary thrombosis and diabetic acidosis, we must appreciate the possible detrimental effect of overenthuisastic treatment with fluids, salt, and insulin. The ketosis must be abolished as rapidly as is consistent with the cardiac reserve but continuous observation of the patient is essential. When the patient is recovering from acidosis, the prevention of hypoglycemia and hypopotassemia become important considerations. We have mentioned the cardiovascular effects of insulin hypoglycemia. Hypopotassemia, in addition to electrocardiographic changes, may cause tachycardia, gallop rhythm, murmurs, and hypotension. Thus, collapse during apparent recovery from acidosis may be due to too much insulin or too little potassium, either being readily correctable, or to extension of the infarction.

Congestive heart failure, including pulmonary edema, was the *dominant* manifestation of cardiac insufficiency in twenty-seven patients (31 per cent) in this diabetic-cardiac group, although several others exhibited some failure in the course of their illness. Eight patients died as a result of the congestive heart failure. The failure was due to rheumatic valvular disease in one instance, to hypertensive or hypertensive-arteriosclerotic heart disease in fourteen, and to arteriosclerotic heart disease in twelve. Whatever the etiology of congestive failure, it may aggravate the diabetes and precipitate acidosis. The increased metabolism of failure and the anorexia, nausea, vomiting, and

bowel disfunction which may follow hepatic and intestinal engorgement may cause marked interference with diabetic control. When diabetic acidosis is complicated by congestive failure, the problem again resolves itself primarily into one of fluid and electrolyte balance and the considerations are analogous to those discussed under coronary thrombosis. Digitalis is administered as indicated, attempting to avoid nausea and vomiting secondary to overdosage. Because digitalis overdosage may cause depletion of myocardial potassium, there is some theoretical question as to the advisability of digitalizing patients with hypopotassemias. However, awareness of the possibility of potassium depletion states in diabetic crises will usually avert such difficulties.

Because of the importance of the Vitamin B complex in the intermediary metabolism of carbohydate, and because of the possibility that the uncontrolled diabetic may be deficient in thiamine as a result of increased demands and loss via polyuria, Vitamin B and, in particular, thiamine should be given to diabetics in failure. It may eliminate any element of the failure which might be due to thiamine deficiency.

Primarily right-sided failure is not as immediate an emergency as pulmonary edema. When right-sided failure is complicated by diabetic acidosis, it is wiser to give sufficient fluids, salt, and insulin to eliminate the acidosis and to rely on later administration of diuretics to relieve the increased peripheral edema which may result. With severe pulmonary edema not relieved by glycosides, oxygen, aminophylline, etc., early diuresis is essential. Concurrent diabetic acidosis will be further complicated by the fluid and electrolyte loss secondary to diuresis. Hypertonic (50 per cent) glucose solutions with sufficient insulin coverage may be helpful for diuresis here. Obviously, no rule of thumb can be laid down for such cases where therapeutic measures seem to pull in opposite directions. Decisions as to whether to administer intravenous fluids and electrolytes, or to withhold salt and administer diuretics must depend on the exigencies of the moment. A flame photometer is a most helpful instrument in situations of this sort, but only in conjunction with alert physicians who are aware of the complications of the diseases under treatment and of the complications of the treatment itself.

Summary

1. Eighty-six patients with diabetes mellitus and heart disease were admitted to hospital in a one-year period.

2. These patients included twenty-five with acute coronary thrombosis and twenty-six with congestive heart failure. Nineteen of the patients died but none of the deaths was attributed to diabetic coma.

3. The problems presented by diabetic cardiacs are reviewed and their management discussed.

18254 Livernois Avenue

NEW ANTI-RHEUMATIC DRUG STUDIED

A new synthetic anti-rheumatic drug, which does not have hormonal effects of cortisone, has been shown to exert anti-rheumatic effects in gouty arthritis and rheumatoid arthritis.

Dr. Bernard B. Brodie, chief of the pharmacology laboratory of the Public Health Service's National Heart Institute, of the Department of Health, Education and Welfare, and colleagues at Goldwater Memorial Hospital and Mt. Sinai Hospital, New York, N. Y., reported on the new drug at the meeting of the Society for Pharmacology and Experimental Therapeutics in Charlottesville, Virginia, September 8, 1954.

Recently introduced, the drug G-25671 (a Geigy compound) is a derivative of phenylbutazone (Butazolidin). It exerts a less powerful anti-rheumatic effect but does not cause retention of sodium and water, thus showing that there is a possibility of eliminating at least one harmful effect of phenylbutazone. In addition, the new compound lowers blood uric acid to a marked degree by causing its excretion in urine.

This work is part of a program to develop a drug retaining the anti-rheumatic action of phenylbutazone but devoid of its side effects. A series of drugs is being screened in animals and man for anti-inflammatory activity.

If further experimentation should indicate that the new drug has such low toxicity that long-term administration is feasible, G-25671 with its combined anti-rheumatic and uricosuric effects may prove useful in treatment of chronic gout.

Cerebral Dysrhythmia and Associated Insulin Reactions

By George C. Thosteson, M.D.
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INSULIN reactions are a feature of unstable diabetes. When reactions occur with undue frequency, an analysis of their reality is essential. Some patients, having been warned about the possibility of insulin reaction, may misinterpret certain symptoms, not of hypoglycemic origin, as insulin reaction. When these occur frequently and are treated with carbohydrate in excess of dietary allotment, hyperglycemia and excessive glycosuria usually results. The patient and his physician, then, concerned about the diabetic control, decide that more, and usually needless, insulin is required.

Symptoms likely to be confused with those of a hypoglycemic state usually are "peculiar" lightheadedness, headache, transient weakness, mental confusion or visual disturbances. When these occur frequently, especially in a person whose diabetes is difficult to control, further study of the patient is warranted.

Maddock and Krall[5] classify insulin reactions into two types: (1) *adrenalin-like*: nervousness, tremors, weakness, hunger, tachycardia, palpitation, sweating, and pallor; (2) *central nervous system type*: headache, nausea, vision, and speech disturbances, slow reactions, mental confusion, personality changes, anxiety, depression, twitching, crying, masked facies, convulsions, and coma.

It will be noted that the symptoms referred to above, mistaken for those of insulin reaction, simulate those of the central nervous system type. Some of these are also seen in petit mal epilepsy.

Hypoglycemic reactions due to a relative excess of insulin in the diabetic follow a fairly consistent pattern. As a rule, they are relieved, quickly, by ingested carbohydrate (soft drink, syrup, candy, food, et cetera). The time of occurrence of true insulin reaction also follows a pattern, relatively constant for the type of insulin being used. Thus, reactions from protamine zinc insulin tend to occur in the early morning hours; those from globin and NPH in the late afternoon; those from mixture of regular and PZI either before lunch or supper; and, those from lente insulin are reported occurring in the early evening.[5] There is usually a history of a delayed, light or omitted meal, excessive exercise, or possibly accidental overdose of insulin. A relatively low blood sugar is usually obtained at the time of the reaction. Thus, a careful history as to the time of occurrence and the events preceding the reaction is essential and often revealing. When a bizarre pattern is elicited, usually in an uncontrolled diabetic, one is justified to question the hypoglycemic origin of the symptoms.

Greenblatt, Murray, and Root[3] state that it is not known whether repeated insulin reactions can produce abnormal cerebroelectroactivity. On the other hand, Himwich[4] states that profound hypoglycemia can depress brain activity to one-quarter its normal rate. Greenblatt and his associates, utilizing electroencephalograms, report that epilepsy is no more common in the diabetic than in the non-diabetic individual. These authors also report on the incidence of cerebral dysrhythmia in forty diabetics. Fifty-one per cent of diabetics with frequent insulin reaction were found to have abnormal electroencephalograms.

Fabrykant and Parcella[1] showed the coexistence of spontaneous hypoglycemia with electrocerebral dysfunction as exhibited by the electroencephalogram and suggested it be regarded as a clinical entity. This group[2] continued their studies with labile diabetics. Of seven labile diabetics reported in this study, only one had a normal electroencephalogram. Furthermore, in those not responding to carbohydrate, the reactions occurred at relatively high blood sugar levels. This group responded to anticonvulsant therapy.

The following group of patients were chosen for electroencephalographic study because of frequent, yet bizarre, "insulin" reactions. In most, the diabetes was moderate to severe in type. All of the tracings were taken and interpreted by A. J. Derbyshire, Ph.D., at Harper Hospital, Detroit. The tracings were graded on a scale of one through five, where one is normal and five is diagnosably abnormal.

Case Reports

R. M., a young woman, aged twenty-one, was first seen in ninth year of diabetes and observed through 1951, sixteenth year of disease. Diabetes was discovered 6 months after a head injury (struck by golf ball). Head-

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ache and insulin reaction were frequent complaint. Diabetes was difficult to control and insulin ranged from 64 to 90 units daily. Patient presented slow speech, grinning and grimacing facies, nystagmus, and diminished reflexes. Electroencephalogram in 1944 was grade three (unstable normal—"no evidence of local cerebral lesion or convulsive seizures"). When repeated in 1947, tracing graded three identical with previous pattern. An occasional low blood sugar (50 mg. percent) was obtained and confirmed an alleged hypoglycemic reaction. However, the majority of blood sugar estimations were high and glycosuria was the rule. It was believed this patient had either local brain trauma (not elicited by EEG) or insulin encephalopathy.

R. O'C., male, had onset of diabetes at the age of twelve following a head injury (fell, striking head on stone steps). Diabetes was unstable, with a blood sugar range of 90 to 266 mg. per cent. His average insulin dose was 50 units. There were many reactions and several episodes of ketosis. Electroencephalogram was grade 3.

W. F., a man, aged forty-eight, had diabetes of 14 years' duration. He also had a history of head injury (golf ball). Prior to this injury, however, diabetes was unstable with many reactions progressing to a mild convulsive state. Electroencephalogram was grade 5. Although this patient would not admit benefit from dilantin therapy, there were fewer insulin reactions reported while taking this drug.

S. S., a man, aged twenty-five, had diabetes of 12 years' duration. He had many severe headaches and many reactions. Diabetes was unstable with several episodes of ketosis. There was no history of head trauma. Electroencephalogram was grade three with "brief episodes resembling seizure patterns." Definite decrease in headache and frequency of insulin reactions on dilantin therapy. Diabetes stabilized remarkably after his marriage. He no longer takes the anticonvulsant medication.

R. H., a man, aged thirty-five, reported diabetes of one year's duration. He had stable control on NPH insulin. While at a camp in northern Michigan he was seized with a "severe reaction" at noon during which he fractured a thoracic vertebra. This was the only episode of this sort or anything suggestive of insulin reaction since the onset of his diabetes. The time of the "reaction" was not consistent with the type of insulin used and there had been no skipped meals or unusual exercise. A description of the attack written by one of the fellow campers cast doubt that this was an insulin reaction. Details suggested a classical convulsive seizure. Electroencephalogram was grade 3. Because this was the only attack experienced by this patient and since his general health and diabetic control continues to be good, no anticonvulsant treatment has been instituted.

B. B., a fourteen-year-old girl, had diabetes of four years' duration, a severe type requiring 76 to 98 units of insulin. She had constant hyperglycemia and glycosuria, yet she reported many reactions for which she took a carbohydrate food. The "spells" consisted chiefly of nervousness and a peculiar feeling in her head. The frequency of the "spells" aroused suspicion as to their nature. It was obvious that the poor control was related to excessive food. Electroencephalogram was grade 5. Milontin was started in May 1954, and no "spells" have occurred since. The patient not only feels better but is having less glycosuria.

Summary

Attention is called to the existence of disturbed brain activity as a factor in alleged insulin reactions in diabetics.

This should be considered when "reactions" occur with undue frequency and are not consistent with the typical pattern of hypoglycemia.

Diabetics having frequent reactions should have the benefit of encephalographic study.

Anticonvulsant therapy minimizes or eliminates the symptoms and assists in obtaining better control of the diabetes.

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1139 David Whitney Bldg.

An early lesion of lung cancer produces no symptoms and reveals itself as a silent shadow on the x-ray film or through cancer cells in bronchial secretions on cytologic examination.

Cancer of the breast is three times as common in daughters of women with breast cancer as in the general population, and in the daughter the disease develops approximately ten years earlier than in the mother.

Problems of the Diabetic Patient Requiring Surgery

By LeRoy C. Harris, Jr., M.D. and
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MODERN ADVANCES in the treatment of diabetes mellitus have presented the physician with unusual opportunities for the control of this particular disease. That progressive success in the metabolic management of diabetes is being encountered, is evident not only in the increased number of patients being treated, but in the increased number of elective surgical procedures being performed upon this group of patients. The number of persons who have survived with diabetes for a period of twenty-five years without demonstrable complications is also increasing, Joslin[5] reporting one such case in 1948 and thirty-four in 1952. Furthermore, it is becoming more evident every year, since the advent of insulin therapy, that if the diagnosis can be made sufficiently early, the management is available to prevent the development of the complications which lead to the statement that, the life expectancy of a diabetic is three-fourths that of a comparable non-diabetic.

Opportunities for Diagnosis

The very nature of one group of complications in diabetes should afford the attending physician an opportunity for immediate suspicion of diabetes and establishing the diagnosis. The incidence of diabetes in this country is such that five million persons are expected to develop the disease before death. For this reason, a knowledge of these very same complications should become a part of a non-diabetic patient's education by his family physician, a problem not unlike that of cancer detection. The group of complications which are referred to, are those associated with infections and a peripherally diminished blood supply. These most commonly are neck carbuncles, multiple skin furnucles at any location, infections about the genitorectal region such as rectal abscesses or pruritus vulvae, and the consequences of ischemic changes in the feet such as spontaneous gangrene or toe infections following minor trauma. These complications, which are associated with a decreased resistance to infection and tend to be peculiar to diabetics, are by their very nature demanding of the patient that he seek eventual medical care. If only he could be educated to seek such attention immediately and not wait days, untold damage could be avoided. Unfortunately, it must be mentioned that as in the treatment of skin cancers with salves and ointments without benefit of a biopsy and microscopic tissue diagnosis, there is local treatment of infections in undiagnosed diabetes without the benefit of urinalysis. Complete correction of this condition along with continued diabetic education of their patients rests with all physicians and will contribute greatly to the next advances in this controllable disease.

General Hygienic Care

When one considers that the median age of onset of diabetes in males is forty-five years and in females is fifty years, it is evident that the problems of a great number of these patients are accentuated by those which are usually presented after the sixth decade. One of the most conspicuous of these problems in the diabetic is the progression of peripheral occlusive arterial disease in the lower extremities. Education of the patient in the application of proper hygienic and prophylactic measures is of primary importance and again the responsibility of all physicians. These measures are worthy of repetition and should include the following:

1. Cautioning the patient against unnecessary compression of the major arteries as occurs when wearing encircling garters or sitting with the legs crossed over the knees.

2. Wearing loose-fitting wool socks which are changed daily and also wearing broad-toed shoes, which have been carefully fitted.

3. Administering daily foot care which includes soaks in warm water which is not over ninety-five degrees Fahrenheit as determined by a thermometer. The soaks are followed by drying with cotton pledgets dipped in 70 per cent alcohol and finally the skin is lubricated lightly with lanolin. Nails should be trimmed in a transverse manner and attention given to corns and calluses by using sterile techniques when trimming followed by the proper application of pressure relieving pads. A weekly foot inspection by another member of the family is helpful.

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4. Exertion of the utmost caution in avoiding trauma to the bare feet by always wearing shoes. Accidental trauma against furniture, notably bedposts while stumbling in the dark is a common story after hospitalization for a cellulitis of the foot.

5. Care in avoiding the application of hot water bottles or any other method of excessive heating. This is especially important since the diabetic with peripheral vascular impairment is unduly sensitive to cold and will be naturally inclined to apply external heat. The locally increased metabolism of the warmed tissues cannot be supported by the impaired arterial supply to these tissues and the cumulative effects of ischemia supervene.

Acute Abdominal Surgery

The surgeon who is evaluating a diabetic for possible surgery has several problems which set his patient apart from the non-diabetic. The diagnosis of an acute abdomen may be confusing in one of two ways. First, the acidotic state complicating uncontrolled diabetes may be accompanied by nausea, vomiting and abdominal pain simulating an acute surgical abdomen. This tends to occur more commonly in children. Secondly, the signs and symptoms of a given inflammatory abdominal disorder, such as appendicitis may become diminished in the diabetic to the point where the correct diagnosis is unduly delayed or not made. Furthermore, in such cases the severity of the inflammatory condition with a failure in local tissue response is remarkable. Appendicitis in a diabetic is commonly accompanied by gangrene and a general retardation of the walling-off process. Consideration of these factors should make the surgeon more aggressive in his approach to a diabetic who presents a vague picture simulating appendicitis, and, earlier operation is indicated. The following case report serves to illustrate some of these points.

Case Report

W. M., a twenty-one-year-old Negro man, was admitted to Detroit Receiving Hospital September 25, 1951. He complained of lower abdominal pain of one-day duration, which was not localized and tended to be more severe on the left than on the right. Anorexia and vomiting occurred after the onset of the pain. There was no change in bowel habits and the patient noted dysuria since the onset of the abdominal complaint. The past history was that of diabetes mellitus since the age of eleven with no episodes of acidiosis or insulin reactions. For the past year he had been taking 80 units of NPH insulin and hadn't tested his urine for several months. Examination revealed the patient to be in no remarkable distress. The temperature was 100 degrees F., and the pulse was eighty-eight. The findings were generally negative except for the abdomen which presented minimal tenderness in both flanks and no muscle spasm. The WBC was 12,500 with 85 per cent neutrophiles. The urine showed three plus sugar and acetone, whereas the blood sugar was 152 mgm/100 cc. The diagnosis in addition to diabetes mellitus was possible urinary tract infection or possible appendicitis. Therapy was started consisting of regular insulin, and intravenous saline followed by a diabetic diet and insulin to reaction.

The following day the patient was slightly lethargic with a temperature of 100 degrees F. A roentgenogram of the abdomen revealed multiple dilated loops of small bowel in the upper left abdomen with a diffuse haze consistent with a low jejunal obstruction and peritonitis. Abdominal examination again revealed no muscle spasm nor superficial tenderness. Rectal examination was negative except for a slightly enlarged, soft prostate gland. The diagnosis of appendicitis was not forthcoming, so an abdominal paracentesis was done in both lower quadrants and yielded a pink-yellow fluid which on smear was packed with pus cells. Appendectomy was immediately performed and on opening the peritoneal cavity, free exudate was encountered. A ruptured appendix was found with no evidence of any walling-off process. Subsequently, the patient was treated with long tube suction for seven days and antibiotics. The only complication was a wound abscess drained on the seventh post-operative day and he was discharged after a hospitalization of twenty-four days.

Elective Surgery

The problem of elective surgery for the diabetic has become resolved by the concept that if the diabetes has been under good control the indications for the elective surgery are the same as for a non-diabetic. There are several reasons which will combine to cause a yearly increase in the number of diabetic patients who are being evaluated for elective major and minor surgery. One is the steady increase in the number of diabetics who are successfully approaching the decades in which the degenerative diseases and carcinoma are more likely to become manifest. Secondly, the increased medical supervision of the lives of these diabetics will bring forth the diagnosis of carcinoma and other surgical conditions earlier and in greater numbers in comparison to the non-diabetic population which does not submit to routine physical examination. Indeed, the thought has been expressed that the efficiency and thoroughness of diabetic care may one day usher more of these people into the cancer-occurring ages than will proportionately occur in the non-diabetics.

The evaluation of a patient for major resection

surgery today is performed with the thought in mind that the operation, although planned for two to three hours, may take two to three times as long and involve variable levels of peripheral circulatory depression and fluid losses. Certainly the pre-operative cardio-pulmonary-renal status is a well recognized criteria for such an evaluation. However, in addition, there is increasing evidence that the response and the tolerance of the organism to the shock state is vitally reflected in the status of the liver. Thus, a theory[1] of shock has been advanced based on the production of a vaso-depressor material (VDM) in the anoxic liver. Such an iron-containing protein substance[7] is demonstrable in the circulation of laboratory animals which have been subjected to controlled bleeding down to shock levels. It is capable of depressing the sensitivity to epinephrine of the precapillary sphincters, thereby giving rise to peripheral vascular dilatation, and if progressive, a state of irreversible shock. Furthermore, it has been demonstrated[2] that following controlled bleeding to a state of irreversible shock in dogs, as noted by a failure to respond to transfusions, the mortality is nearly 100 per cent. If treatment following a similar bleeding procedure consists of cross-perfusing the splenic vein of the shocked animal with the blood of a healthy animal, survival occurred in eleven of twelve dogs. On the other hand, cross-perfusions into the systemic circulation of animals in irreversible shock resulted in the death of fifteen of seventeen animals. Other methods of increasing the arterial blood supply to the liver such as the administration of bile salts,[4] or the anastomosis of the splenic artery to the splenic vein[3] have also resulted in improved response to shock and a lower mortality in the experimental animal.

The inference that adequate glycogen stores in the liver of a diabetic will increase the tolerance to the shock state has not been experimentally studied. However, a certain degree of liver dysfunction occurs in diabetes and apparently increases markedly with the increase in the complications of diabetes such as obesity, recurrent coma, tuberculosis, gangrene and vascular complications. Thus, in a series of 148 patients,[6] 39 per cent had abnormal liver function tests and it was noted that the sex, age and duration of the diabetes apparently had no relation to this abnormality. However, there was some increase in dysfunction as the total insulin requirement increased. The observation was made that the nutritional deficiencies which resulted from the effort to limit glycosuria by a low carbohydrate contributed to liver disease. It would seem pertinent, therefore, to re-emphasize the necessity for maintaining a proportionately high carbohydrate intake covered with insulin in the diabetic preoperatively in the effort to maintain maximum glycogenesis. Further studies along this line would seem to be worthwhile.

Anesthesia

The increased understanding of the pathological physiology of diabetes has led to a more logical and satisfactory handling of anesthesia for the diabetic patient. In general the diabetic patients may be divided into one of two types: (1) The "juvenile" diabetics who have the characteristics of being underweight, are very sensitive to insulin, likely to go out of "control" easily and develop acidosis. These patients usually have no vascular complications. (2) The elderly obese diabetics who are relatively insensitive to insulin and have serious complications. The vascular complications are generally of more importance in these patients than the disturbance of carbohydrate metabolism. The anesthetic problem is therefore, somewhat different according to the type of diabetic patient being handled.

Diabetic patients for elective surgery should be under the best possible control before being brought to operation. This includes adequate pre-operative diet and establishment of the daily maintenance dose of insulin. On the day of surgery the patient should receive the proper dose of insulin, and since the patient will be unable to eat his regular diet that day, the insulin should be covered with glucose by intravenous infusion. One method of accomplishing this is to give 2 gms of glucose for each unit of insulin, but it is better to treat each patient as an individual with the following method. The patient is given one-fourth of the total daily dose of regular insulin which is covered with 50 gms of glucose intravenously, then fractional urines are checked every four hours and insulin administered as indicated. The diabetic patient for emergency surgery must be handled somewhat differently. Blood glucose, CO_2 combining power and pH should be checked, and the urine sugar and ketones determined. If at all possible, surgery is delayed until the treatment of the diabetes is under way. For the patient in diabetic coma who must have immediate surgery, the following plan is carried out. Intravenous saline is started and if

the patient is in shock, plasma or blood is given. One hundred units of regular insulin in 1000 cc. of 5 per cent glucose is started followed by 100 units of regular insulin given subcutaneously. A catheter is placed in the bladder facilitating an hourly check of the urine and insulin is administered according to the urine sugar. If immediate surgery is necessary the above treatment is carried out during the operation. Gastric distention is a frequent complication of diabetic coma and a tube should be passed into the stomach to remove the gastric secretions. The treatment outlined above will allow the diabetic patient to receive anesthesia with relative safety.

The particular anesthetic agent or technique chosen will make little difference if administered skillfully and a clear understanding of the problems involved are kept in mind. Intelligent choice of the proper anesthetic agent and technique will depend upon the recognition of the type of diabetic patient, i.e. "juvenile" or "elderly obese," the general status of the patient and the site and magnitude of the surgery.

Of the inhalation agents, cyclopropane, nitrous oxide, and ethylene produce no disturbance of carbohydrate metabolism or acid-base balance. The hyperglycemia and acidosis attributed to ether have been found to be largely due to faulty administration, and if correctly used, ether should cause insignificant disturbances of metabolism. The ultrarapid intravenous barbiturates and curare drugs can be used as safely in the diabetic patient as in the non-diabetic patient. All of these agents may be administered with minimal effects on the cardiovascular system. The major disadvantage of inhalation or intravenous anesthesia is the postoperative nausea and vomiting that may occur and prevent the patient from immediately resuming his normal diet.

Regional anesthesia produces no effects on carbohydrate metabolism or acid-base balance; nausea and vomiting are usually minimal and the patient can immediately resume his normal diet. Nerve blocks, epidural and spinal anesthesia can be used with excellent results in proper selected diabetic patients. The major disadvantage of epidural or spinal anesthesia is the possibility of sympathetic paralysis and resulting hypotension proportional to the number of sympathetic fibers blocked. Thus the danger of severe hypotension will be greater with high epidural or spinal anesthesia, than when only a low level of anesthesia is obtained, and it can be seen that while spinal anesthesia might be ideal for amputation of a gangrenous foot in an elderly diabetic, spinal would be hazardous for upper abdominal surgery. Consequently, the selection of the best anesthetic agent for the diabetic patient will depend upon a complete knowledge of the properties of the various anesthetic agents and a clear understanding of the type of diabetic patient to be anesthetized.

Summary

We would like to point out that of all the surgical problems presented by diabetic patients, we have elected to restrict our discussion to those in which further advances can most likely be anticipated. This includes the promotion of the diagnosis of diabetes, the improvement in hygienic measures to the extremities, the application of accurate abdominal diagnosis and a recognition of the eligibility of a well-controlled diabetic patient for the majority of surgical and anesthetic procedures.

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1401 Rivard

Enormous and gratifying progress has been made in prolonging life of cancer patients in usefulness and comfort by chemotherapeutic, endocrinological, surgical and radiological palliative measures.

Since prognosis of intraoral cancer usually depends on early diagnosis, any sore in the mouth existing more than four to six weeks should have adequate biopsy to determine whether it is malignant.

Some Current Concepts of Etiology and Pathogenesis of Diabetes Mellitus

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AS IN ALL diseases of major importance the amount of data on diabetes mellitus and carbohydrate metabolism is increasing steadily. In part, experimental work appears to be readily coordinated with clinical diabetes and in other instances the relationship is less clear and even contradictory. At any rate, etiology is still not definitely proven, although associated factors such as heredity and obesity are well established. Of the many modes of attack on this entity the following includes those that appear to be of particular interest in relation to clinical diabetes.

Experimental diabetes can be produced in a number of ways. The most obvious is total or subtotal pancreatectomy. This is of little importance in man except for rare cases such as extensive pancreatic invasion by neoplasm or hemosiderosis.

Another and rather intriguing method is the administration of alloxan, which destroys the function of the beta or insulin producing cells in about five minutes. This is a chemical reaction and does not work through the pituitary or adrenal glands. Other substances such as dehydroascorbic acid act similarly. Alloxan is related chemically to uric acid, dialuric acid being an intermediate product. However, disturbances in uric acid metabolism have not as yet been shown to play an important role in human diabetes. In fact it has usually been felt that, as in some animal species, human islet cells are resistant to alloxan. Recently in an individual with a pancreatic islet cell adenoma, administration of alloxan destroyed normal islet cells, but left the adenomatous cells intact. The place of alloxan in human diabetes is therefore still unsettled.

An interesting and possibly clinically significant sidelight should now be noted. Alloxan diabetes can be prevented by glutathione, cysteine, BAL, and other agents. Since 12 per cent of insulin is cystine, an oxidation product of cysteine, and since glutathione also contains cysteine, there may exist an enzymatic "competition" between insulin and glutathione for this component. In some animals with low glutathione content induced by deficient diet uric acid administration can produce diabetes. These and other related facts probably raise more questions than are answered. One may conjecture whether alloxan can be formed from uric acid in the human and whether it interferes with the absorption of cystine into the insulin molecule. From the clinical standpoint some students have felt that a diet high in protein including cysteine and methionine could therefore play a role in preventing diabetes. At any rate, in human diabetes there appears to be no important variation in uric acid or glutathione. This does not apply to certain diabetic states such as seen in steroid diabetes.

Anterior pituitary substance has long been known to be important in carbohydrate metabolism and to be capable of producing permanent diabetes. More recently its growth factor, somatotropin, has been shown to exert a similar effect. Our knowledge of this latter fact has expanded greatly, and will be discussed separately. At this time we know that either whole anterior pituitary substance, or somatotropin, produces an early reversible change in the pancreas (idiohypophyseal phase of Young) characterized by hydropic degeneration of the islet cells (glycogen deposition), and which can go on to a permanent (metahypophyseal) diabetic phase if administration is continued. In the case of the whole anterior pituitary extract there is early an increased overproduction of glucose (increased gluconeogenesis) and later decreased insulin production, probably due to overwork and exhaustion of the islet cells. Peripheral tissue inhibition of carbohydrate metabolism is also effected.

Removal of the pituitary in experimental diabetes is followed by marked amelioration of the diabetes, increased sensitivity to insulin, and inability to maintain normal carbohydrate stores. This has its human counterpart in those rare cases wherein diabetes has become less severe or "cured" with the onset of pituitary cachexia. Since the original experimental work was done with crude anterior pituitary substance, it is problematical how much of the effect was due to ACTH which produces steroid diabetes, a so-called diabetic state, and how much to somatotropin which appears to be more truly diabetogenic.

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Prolonged hyperglycemia, created by continuous administration of glucose, can also lead to permanent diabetes probably in a manner similar to that noted above i.e. by ultimate exhaustion of the islet cells. The question arises whether hyperglycemia is the important factor in both instances. However if this is so it is difficult to explain why human uncontrolled diabetes so often does not increase in severity. Furthermore the appearance of certain complications such as Kimmelsteel-Wilson disease is associated with reduction in severity of the diabetes. Lukens states that one cannot say flatly that hyperglycemia *per se* is or is not injurious. Torgeson's recent work showing that insulin reverses the early hydropic changes in the islet cells even in the continued presence of hyperglycemia further confuses the issue. At any rate hyperglycemia appears to be an essential factor in pituitary diabetes since it can be prevented not only by insulin but by phlorhidzin which simply prevents glucose reabsorption by the renal tubules thereby inducing glycosuria and lowering the blood sugar.

Thyroid substance can under certain conditions produce experimental diabetes probably by increasing total metabolism including insulin requirements, and by increased gluconeogenesis. Although diabetics with thyrotoxicosis are improved by restoration to a euthyroid state, it has not been shown that the thyroid gland plays an important etiologic role in human diabetes.

Certain other abnormalities are associated with "temporary" diabetes or diabetic states as contrasted with true permanent diabetes as seen clinically. Products of the adrenal cortex can create such states. In experimental animals, adrenal cortex has a pituitary like effect by increased gluconeogenesis and by effecting decreased peripheral utilization of glucose. One of the effects noted is a drop in glutathione and an increase in urinary uric acid, as seen in ACTH administration. This is of interest again in relation to the uric acid-alloxan experimental work described above. As with the pituitary gland, removal decreases the severity of the diabetes. Human diabetics developing Addison's disease show marked improvement in their diabetes, and surgical removal of tumors of the cortex have been reported to have effected "cures" in some instances.

Analysis of some of the components of the adrenal cortex has shed further light on its relation to carbohydrate metabolism. Some of the C-11 steroids accelerate gluconeogenesis whereas desoxycorticosterone apparently has to do with maintaining normal absorption of glucose from the gastrointestinal tract. Recently Stetten has shown that cortisone increases the rate of glucose production from non-carbohydrate sources six to seven times. Steroid diabetes is characterized by a relative insensitivity to insulin and a negative nitrogen balance and one may ask at this point whether the deleterious effects of stress, emotional or otherwise, in diabetics is not a form of temporary steroid diabetes and whether stress may not by this mechanism be a precipitating factor at the onset of the disease. Since elevated blood sugar in steroid diabetes usually falls to normal simply by fasting, treatment of behavior problems may have a solid physiologic basis in controlling many labile diabetics.

Obesity has long been known to be associated with and precede clinical diabetes. Experimentally the production of certain hypothalmic lesions lead to obesity by stimulating what may be an "appetite center." This type of obesity is frequently associated with diabetes. The glycosuria seen in head injuries, Claude Bernard's piqure and so-called emotional glycosuria, all probably reflecting hypothalamic dysfunction, again presents a question rather than an answer particularly as to whether the hypothalamic lesions create their effect through the pituitary. Certainly during the process of becoming obese the high food intake puts a functional strain on the islet cells, but since glycosuria frequently disappears with weight loss, obesity cannot be included as a basic etiologic factor. Many individuals obese for years never develop diabetes, so that as with hyperglycemia the predisposing effect of obesity *per se* is still obscure.

Although the liver is of paramount importance in carbohydrate, fat, and protein metabolism, human diabetes is not associated with clear-cut changes in liver functions. Actually most of the liver must be destroyed before significant alterations in carbohydrate metabolism occur. It is therefore unlikely that the liver *per se* is important as a diabetogenic factor. Similarly infection, important as an aggravating and perhaps a precipitating factor, is not in itself diabetogenic.

Aspects of Insulin Action

No discussion of pathogenesis would be complete without awareness of more recent ideas regarding the action of insulin. This complex subject is not yet resolved in spite of much new information indicating the wide scope of its effects. Best in a

recent review presents its role as a central anabolic hormone, lack of which leads to failure of protein, fat, and carbohydrate synthesis and storage, as well as loss of phosphorus, potassium, sugar, nitrogen and ketones from the body. Most ingested glucose (80 per cent) is oxidized, the remainder being converted to fatty acids (lipogenesis) and only a small per cent to glycogen. Stetten showed in 1944 that diabetics could not form fatty acids from dextrose.

The actual site of insulin action is still not settled in the minds of many students. Cori's postulate that this occurs at the level of the action of the enzyme hexokinase which accelerates the necessary conversion of glucose to glucose-6-phosphate still has support. More recently, it has been stated that the essential function of insulin is simply to facilitate or permit passage of the glucose molecule across the cell membrane thus allowing normal carbohydrate metabolism to proceed. There is further evidence that insulin itself enters the cell to participate in intracellular metabolism. This is an attractive theory and would simplify many of the metabolic problems now existing. An apparent anomaly is the fact that work performed by muscle utilizing glucose for energy does not require insulin in many instances.

We note that liver slices from a diabetic animal are not restored to normal in relation to glucose oxidation or lipogenesis by the addition of insulin *in vitro*. If, however, the animal had been previously treated with insulin, then addition of insulin to the *in vitro* tissues was effective, indicating that some intermediary product of normal carbohydrate metabolism is necessary for glucose oxidation and lipogenesis, i.e., that these processes require an active metabolism of glucose with insulin. Cholesterol formation is not interfered with in the *in vitro* studies of tissues from animals not so pre-treated and even increased over normal. The clinical implication of hypercholesterolemia and its possible relation to atherosclerosis is evident. The effect of insulin on glycogen storage is known and its enhancement of glucose oxidation has been directly proven by recent studies using labeled, i.e., radioactive C-14.

Best states that insulin is essential to the protein anabolic effect of growth hormone (somatotropin). Somatrotropin given to animals produces an increased compensatory secretion of insulin, and diabetics given somatotropin need more insulin for control and to prevent a negative nitrogen balance. The importance of insulin in protein anabolism is further seen in the remarkable findings by Best and Salter that even in hypophysectomized animals, and therefore in the absence of somatotropin, insulin can qualify as a growth hormone.

Somatotropin

At this point it may be well to note another important substance capable of producing experimental diabetes as can anterior pituitary extract. Perhaps the best known action of somatotropin in this regard is peripheral inhibition of carbohydrate metabolism, increasing the need for insulin. Insulin is therefore necessary both to prevent a diabetic state and to allow protein synthesis by somatotropin. In fact both hormones may well keep a balance of carbohydrate metabolism and protein synthesis as needed by the body. Parenthetically the so-called available glucose derived from protein is now thought to be nearer 90 per cent of the original protein rather than the time-honored 58 per cent.

Somatotropin produces diabetes only in certain species and in certain stages of growth. Animals capable of growth or lactation are relatively resistant. Adult animals incapable of either become diabetic. Young postulates that somatotropin may therefore be important in human diabetics. An increased amount over a long time, not enough to produce acromegaly, but sufficient to produce changes in protein and carbohydrrate metabolism may lead to diabetes. The oversize babies of women who *later* develop diabetes may be explained on this basis. It has been thought that diabetes, including arteriosclerosis and coronary disease, may be only one phase of a state of excess of growth hormone. Since different species of animals react differently to growth hormone as do different ages and sexes, so may human individuals differ, so that diabetes and arteriosclerosis including coronary disease are seen as different phases of one entity the full picture of which is acromegaly with diabetes. This is a highly theoretical but intriguing concept based on recent studies of somatotropin.

Pre-Clinical Diabetes

That the complications of the disease may actually be a part of the disease has long been suspected. In spite of the desirability of good control of diabetes we do not know that this prevents complications. Recent work indicates that vascular changes may actually precede clinical diabetes. Microscopic changes in the capillaries and ground substance, probably the earliest vascular changes,

are seen in diabetics. They are also seen in healthy children of diabetic mothers—25 per cent of these children had abnormal glucose tolerance curves. Evidence that a potent endocrine factor is present, probably somatotropin, is seen in the findings that children of diabetic mothers have tall stature, obesity, advanced bone and dental development, a high incidence of diabetes and an increase in urinary seventeen ketosteroids—all suggesting increased pituitary activity.

Diabetic children seen at the onset of their disease show a similar picture all of which is indicative of early hormonal change and leads one to feel that the disease probably precedes disturbance in carbohydrate metabolism. Certainly heredity is the most important predisposing factor acting as a simple mendelian recessive. Since it is thought that each enzyme has its own gene, perhaps a gene involving enzyme systems related to insulin or somatrotropic function, or both, is the basic defect.

Juvenile versus Adult Types

Juvenile diabetics, of course, show many differences from adults. Wrenshall found that diabetics with an onset before age twenty-three (cessation of growth) showed marked pathology in the pancreas, with a low insulin content—3 per cent, as compared with the "maturity onset" group (after twenty-three) with fewer pathologic findings and insulin content of 50 per cent. However any relationship of these findings with growth hormone would be entirely theoretical.

Himsworth, with a great deal of clinical support, divides diabetics into: (1) an insulin sensitive group due to insulin lack—usually young, thin, nervous and unstable severe diabetics, and (2) a more obese insulin insensitive older group which does not need insulin to survive. This latter group resembles the idiohypophyseal phase of pituitary diabetes and usually has some insulin in the blood compared with little or none in group one (Bornstein and Lawrence).

Certainly it is clear that at least in the younger group, extra-pancreatic factors, endocrine or otherwise exist. Insulin lack is the basic factor, but it may be absolute as in the pancreatectomized man who requires forty units a day to restore his insulin needs, or relative as in the juvenile diabetic who needs 150 or more units because of extra-pancreatic factors. These latter factors include increased gluconeogenesis, chiefly due to pituitary overfunction, a possible anti-insulin substance, or peripheral destruction or inactivation of insulin, e.g., somatotropin. One such anti-insulin factor is ascribed to the alpha cells of the pancreas. Although such a substance may exist, its role in blood sugar homeostasis is not well defined nor is its site still well established since Volk obtained the hyperglycemic factor from pancreatic substance in which the alpha cells had been destroyed.

Summary

In this brief and necessarily incomplete review it is noted that there are many similarities between certain phases of experimental diabetes and human diabetes, particularly in regard to pituitary hyperfunction. Some of the apparent discrepancies such as the relation of hyperglycemia to the severity and origin of the disease and the role of uric acid need further clarification. The mode and site of action of insulin is not considered as settled by many students, but its importance in protein and fat synthesis as well as on growth itself is expanding. Similarly, the value of growth hormone in carbohydrate metabolism and possibly in human diabetes is becoming evident, and may yet play a dominant role.

A unifying concept of the etiology and pathologic physiology in diabetes mellitus does not yet exist. Insulin lack, absolute or relative is, of course, a basic essential not only in carbohydrate metabolism but in fat and protein synthesis as well. There is evidence that, because of its hereditary background, the disease may be present prior to overt or easily recognized disturbances in carbohydrate metabolism as seen in apparently healthy children of diabetic parents. Obesity, a so-called predisposing cause, may indeed be a part of the disease, due to pituitary or hypothalamic aberrant function. There is strong evidence that vascular complications are not complications at all but a grosser phase of the syndrome beginning early and even preceding clinical diabetes. Since disease entities in general frequently do not always show a full blown picture, it is reasonable to assume that errors in carbohydrate metabolism are only one facet of the disease taken as a whole. The rather bold concept that obesity and arteriosclerotic phenomena including coronary disease are similar facets even when seen alone deserves consideration.

Diabetes is a key disease in that explanation of certain degenerative processes such as arteriosclerosis may well follow clarification of the pathophysiology of diabetes. Recent experimental work lends support to this concept.

10 Witherell

Present Concept of the Action of Insulin

By Sander Paul Klein, M.D.
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THE STORY of insulin begins in 1889. Von Mering and Minkowski reported the development of diabetes mellitus in dogs following complete pancreatectomy.[20] This historic work localized the source of the substance, the deficiency of which resulted in the devastating disease, diabetes. Thirty years passed and in the summer of 1921 Banting and Best demonstrated a constant and dramatic lowering of the blood and urinary sugars following the injection of a pancreatic extract into depancreatized dogs.[2] More highly purified insulin was obtained by extraction of the pancreatic glands of cattle with acid alcohol by MacLeod and later Collip.[6] Insulin was finally crystallized by Abel.[1]

Although a potent substance was now available in a highly purified form which could correct the severe metabolic alterations produced by pancreatectomy, certain questions loomed large and unanswered. At what point in the body chemistry did insulin act? From the physicochemical viewpoint, what did insulin do? During the past fifteen years many attempts have been made to answer these questions. At different times various workers have suggested that insulin influences the following reactions, i.e., the citrate cycle,[13] the synthesis of fat from two and three carbon fragments,[19] and the production of glycogen from glucose.[3] However, none of these theories accounted for the fact that insulin caused both an increased production of glycogen as well as an increase in the utilization of glucose. The work of the Coris[7,17] was compatible with the known facts. The phosphorylation of glucose (glucose-6-phosphate) is the means by which it enters the metabolic pool. This is accomplished by hexokinase in the presence of ATP (adenosine triphosphate). These workers postulated that insulin activates hexokinase by releasing it from the inhibiting effect of the anterior pituitary (Fig. 1).

Evidence soon began to accumulate indicating that the Cori hypothesis was not thoroughly acceptable. It is well known that the hypophysectomized animal shows extreme insulin sensitivity. If the action of insulin was to inhibit the anterior pituitary, in an animal deprived of this gland, insulin should have no effect. The hexokinase system is present in practically all cells of the animal body. Nonetheless, in the absence of insulin in the depancreatized animal the absorption of glucose by the intestine,[8] its reabsorption in the kidney tubules,[11] and its utilization by the central nervous system remain normal.[12] Finally, the original work of the Coris has been difficult to duplicate,[4,5,18] and the finding of decreased hexokinase activity in the tissue of diabetic animals has not been confirmed.

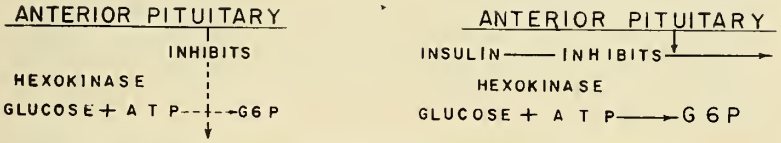


Fig. 1. Diagram of the Cori scheme illustrating the action of insulin on the Hexokinase reaction. ATP-adenosine triphosphate; g6P—Glucose-6-Phosphate.

In the winter of 1949 this problem was again approached in the laboratory of Dr. R. Levine.* The available evidence at that time indicated the following:

1. Insulin had not been shown to act in a cell free system. Therefore, an intact cell might be necessary for the action of insulin.

2. Insulin had not been shown to act upon any of the known steps of the intermediary metabolism of food stuffs. Therefore, the action of insulin might be at some other point in the utilization of glucose.

3. Insulin was known to affect both glycogen formation, i.e., glycogenesis, as well as the breakdown and utilization of glucose, i.e., glycolysis.

Two events occur prior to the separation of the metabolic pathways of glycogenesis and glycolysis. These are the entry of glucose into the intracellular

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*Dr. Levine was Director, Department of Metabolic and Endocrine Research, Medical Research Institute, Michael Reese Hospital, Chicago, Illinois.

space and the phosphorylation of glucose by adenosine triphosphate in the presence of hexokinase. Since the latter theory of the Coris was inadequate to explain all of the known facts, the idea that insulin might act in aiding the transfer of glucose from the extracellular to the intracellular space by increasing the permeability of the cell membrane was advanced.[14,15]

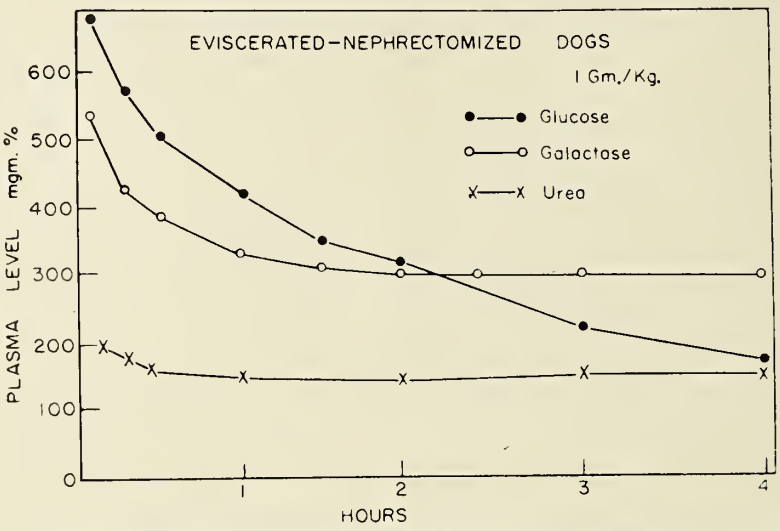


Fig. 2. Plasma concentrations of substances after intravenous administration to eviscerated-nephrectomized dogs. Dosage level: -1 gm/kg body weight. The substances tested were given in a single injection at zero time. Note the continuous fall of the plasma glucose level due to its utilization. By contrast the injected urea is quickly distributed in body water and its level remains stationary, since it is not being produced or used. Galactose behaves like urea; it is not being utilized in the absence of the liver, kidneys and gastrointestinal tract.

Glucose could not be used in these experiments because it would be extremely difficult to separate the process of entry into the cell from the metabolic utilization within the cell. Some other substance had to be chosen which would not be metabolically utilized by the test system. Another six carbon sugar, an isomer of glucose, i.e., galactose, was used. Galactose in the mammal can be utilized only by the liver, intestines and kidneys. Thus, in an eviscerated-nephrectomized dog, galactose behaves as a non-utilizable material. On injecting a given amount of galactose into such a preparation it becomes distributed in a particular volume of extracellular and intracellular fluid, and an equilibrium level is soon reached and maintained (Fig. 2). In an animal deprived in advance of its pancreas and thus free of insulin, the injected galactose will distribute itself in a volume equal to 40 per cent of the weight of the body. In an animal containing a normally functioning pancreas, or one to which insulin is administered, the intravenously injected galactose distributes itself within the entire body water, i.e., at a volume distribution close to 70 per cent (Fig. 3). Tissue analysis showed none of the galactose had been utilized. Thus it is apparent that insulin enabled galactose to enter cells to which it had no access in its absence. An effect of insulin upon the hexokinase system can play no part since the test system, i.e., the eviscerated-nephrectomized dog, contains no phosphorylating system for galactose.

This experimental work showed that insulin promoted the movement of unchanged galactose into the cell. It was also demonstrated that the galactose was not utilized. It would seem highly unlikely that insulin acts upon an intracellular enzyme with respect to glucose while acting to promote the transfer in an unaltered form of so closely related a substance as galactose. It was therefore proposed that the transfer of glucose into the cell is not a free and unlimited process. Rather a cytostructural barrier exists upon which insulin acts to promote entry.

Confirmatory evidence was soon forthcoming aided by the utilization of radio-isotopes. Drury and Wick[9] using radioactive galactose demonstrated, in the eviscerated-nephrectomized animal, that insulin aids the entry of galactose into the

cell where it remains non-utilized. Park[16] using isotopic glucose was able to determine the concentration of free glucose as well as the phosphorylated glucose within the cell. When insulin was present, the intracellular concentration of free glucose was four to five times that of the insulin free preparation. This data thus confirms the evidence that insulin is concerned with accelerating a transfer mechanism, independent of the hexokinase reaction, which facilitates the passage of glucose across cytostructural barriers.

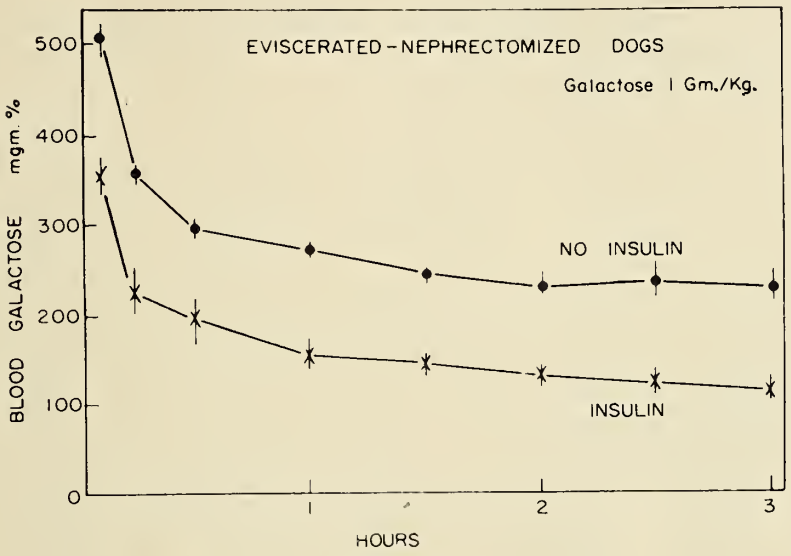


Fig. 3. Blood concentrations of galactose after intravenous administrations to eviscerated-nephrectomized dogs. Galactose was injected at zero time. Note that insulin caused a faster and wider distribution of the galactose. The galactose "space" in the absence of added insulin was about 45 per cent of body weight; in the presence of added insulin this space widened to about 70 per cent of body weight. The vertical lines indicate range of variation of all values obtained.

This effect of insulin on the distribution of glucose and galactose is not a nonspecific effect, i.e., increasing membrane permeability to all types of substances.[10] Thus the rate of entry of d-fructose, d-mannose, l-sorbose, d-arabinose, sucrose, urea, creatinine and sodium into the peripheral tissues of the eviscerated animal is not enhanced by the administration of insulin. Glucose and galactose have the same configuration at the first three carbon atoms. The sugars not affected by insulin differ from this common configuration. However, d-xylose and l-arabinose, five carbon sugars with the same configuration as d-glucose and d-galactose, are affected by insulin in a similar fashion to these latter sugars. Therefore, it appears that insulin affects the transfer of sugars across cell membranes where the chemical configuration about carbon atoms one, two and three is similar to glucose (Fig. 4).

Summary

Although many of the actions of insulin have been known since the historic work of Banting and Best, the locus of its action remained unknown. The accumulated evidence indicated that the effect of this hormone must be at the initial step of phosphorylation or at the point of entry into the cell. Previous work indicating the effect of insulin as an inhibitor of the pituitary, allowing the hexokinase system to phosphorylate glucose, was shown to be unacceptable. The proposition that insulin aided the entry of glucose into the cell was investigated. Using galactose, an isomer of glucose, in eviscerated-nephrectomized dogs, a substance was available which was not utilized but nevertheless would enter the cell. In an insulin free preparation the galactose distributed itself in a volume equal to 40 per cent of the body weight. In the presence of insulin, this area of distribution increased to 70 per cent of the body weight, i.e., total body water. Thus insulin enabled galactose to enter cells to which it had no access in the absence of the hormone. Phosphorylation could not be a factor since there is no known mechanism for

the phosphorylation of galactose. Since insulin acts by aiding the entry of galactose into the cell, it is a reasonable assumption that its effect should be

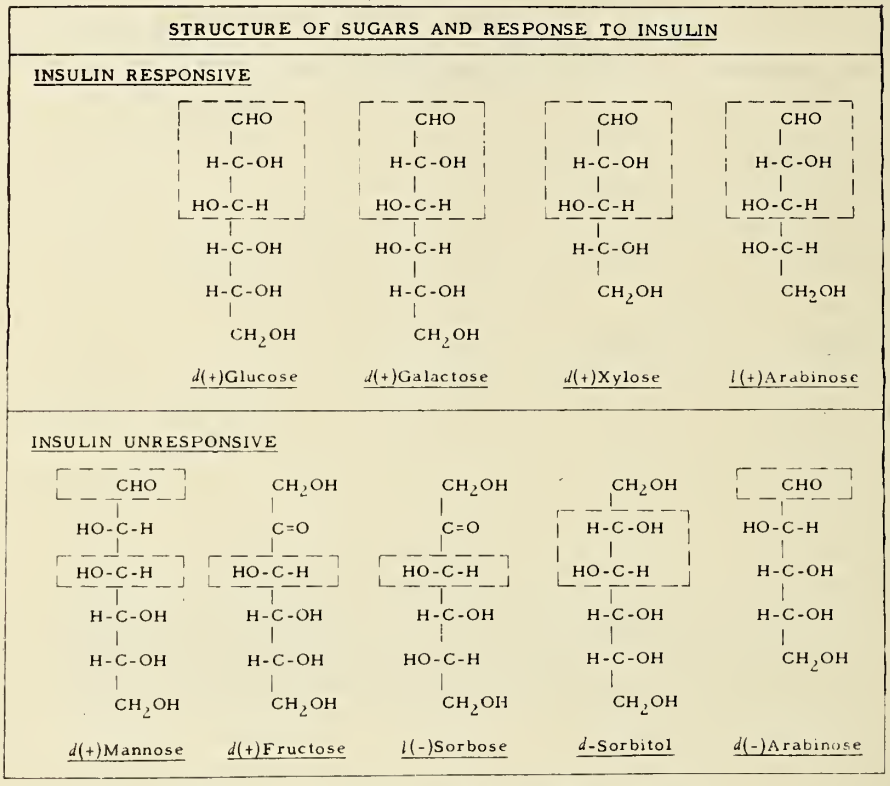


Fig. 4. Structure of sugars and response to insulin.

similar for glucose, rather than affecting some intracellular enzyme system. This hypothesis has been confirmed by the use of isotopic galactose and glucose.

Other substances including five carbon sugars were studied in a fashion similar to galactose. It was found that in addition to the six carbon sugars, d-glucose and d-galactose, two five carbon sugars i.e., d-xylose and l-arabinose were aided into the cell by insulin. The chemical configurations of these sugars indicated that insulin had an effect upon only those sugars possessing a structure similar to glucose at carbon atoms one, two and three.

Therefore, insulin increased the carbohydrate oxidation, utilization and transformation by increasing the intracellular supply of glucose, as well as other sugars having a similar configuration around carbon atoms one, two and three. This is accomplished by promoting the entry of the sugar into the cell past the cytostructural barrier. Once within the cell, the sugar enters the metabolic pool.

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14825 W. McNichols

Hidden Insulin Reaction and the Labile Diabetic Patient

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NUMEROUS ARTICLES and medical literature have dealt at some length with a group of diabetics who have been variously characterized as the brittle, the labile, the unstable or simply the hard-to-control diabetic. It is fortunate, for our basic sanity, that this group constitutes only a small percentage of those persons suffering from diabetes. Despite the small percentage, they constitute real worries and frustrations for the physician who treats more than an occasional diabetic.

It is generally well recognized that the severe juvenile diabetic is one whose disease is usually characterized by lability. Another subdivision of labile diabetes, in which we have been interested, is a group who have been susceptible to good control over quite a number of years and then without apparent cause change rather rapidly and become difficult to control. This occurrence does not appear to have been observed in the pre-insulin era but rather has been a development coincident with the use of insulin. It may be interpreted to represent an unusual response of certain diabetic patients to insulin therapy, and hence, it can be grouped with the growing classification of iatrogenic disease. We will not enter in this paper into any detailed philosophical discussion of the mechanisms involved in the production of this phenomenon of lability in diabetics; rather, we wish to call attention to one facet of the problem: a feature which we have termed the hidden insulin reaction.

The common clear-cut, precise reaction to crystalline or short acting insulin with its tachycardia, flushed sweating, hunger, weakness, visual abberations and all the other classical signs is thoroughly familiar. When NPH insulin is given in unnecessarily large dosage or with an inadequate dietary prescription, the blood sugar "drop" occurs most commonly in the late afternoon or early evening. Such a reaction is relatively commonplace and readily recognized. It is well known that insulin reactions may vary in clinical form from patient to patient. However, the reactions seem to show a fairly constant pattern for a given patient. With overdosage of PZI, and with a certain group of patients receiving NPH insulin, the lowest blood sugar may occur in the early morning hours. The hypoglycemia of this nature may and frequently

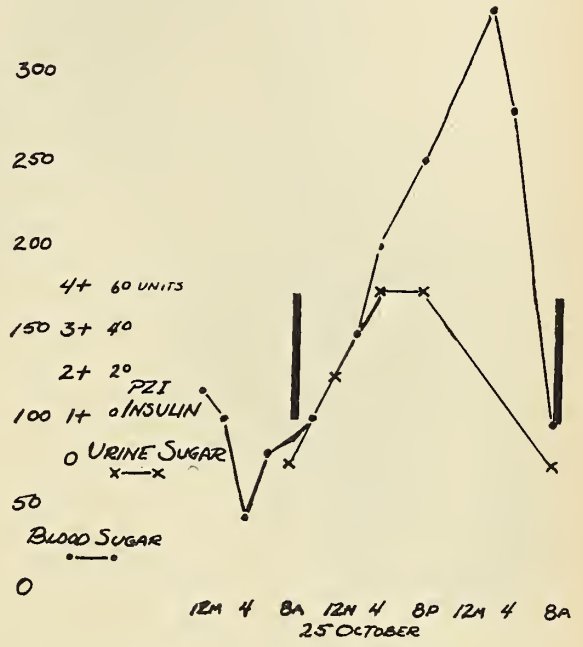


Fig. 1. Severe nocturnal hypoglycemic episode with the typical subsequent hyperglycemia and glycosuria. Routine fasting blood sugar determinations would obviously fail to show this "hidden" insulin reaction.

does awaken the patient with a drenching sweat, a severe headache, and other signs which are relieved by the intake of carbohydrate. However, a significant number of diabetics seem to go through such a markedly hypoglycemic episode without being aware of its occurrence or, perhaps, only complaining of having awakened with dampened bedding or pajamas. It is this type of reaction that we are characterizing as the "hidden" insulin reaction.

Our observations indicate that not infrequently following such an early morning reaction, the blood sugar on the following day rises to abnormal degrees and four plus tests for urinary sugar may be present. The appearance of this marked glycosuria on the day following a "hidden" nocturnal insulin reaction tends to lead the physician to increase the dose of whatever type of insulin is being used. This increase in dosage actually aggravates the condition and leads to further and more severe "hidden" insulin reactions and subsequent rebounding to hyperglycemic levels. The possible mechanisms involved in this suggested phenomenon will be considered elsewhere. This pattern has

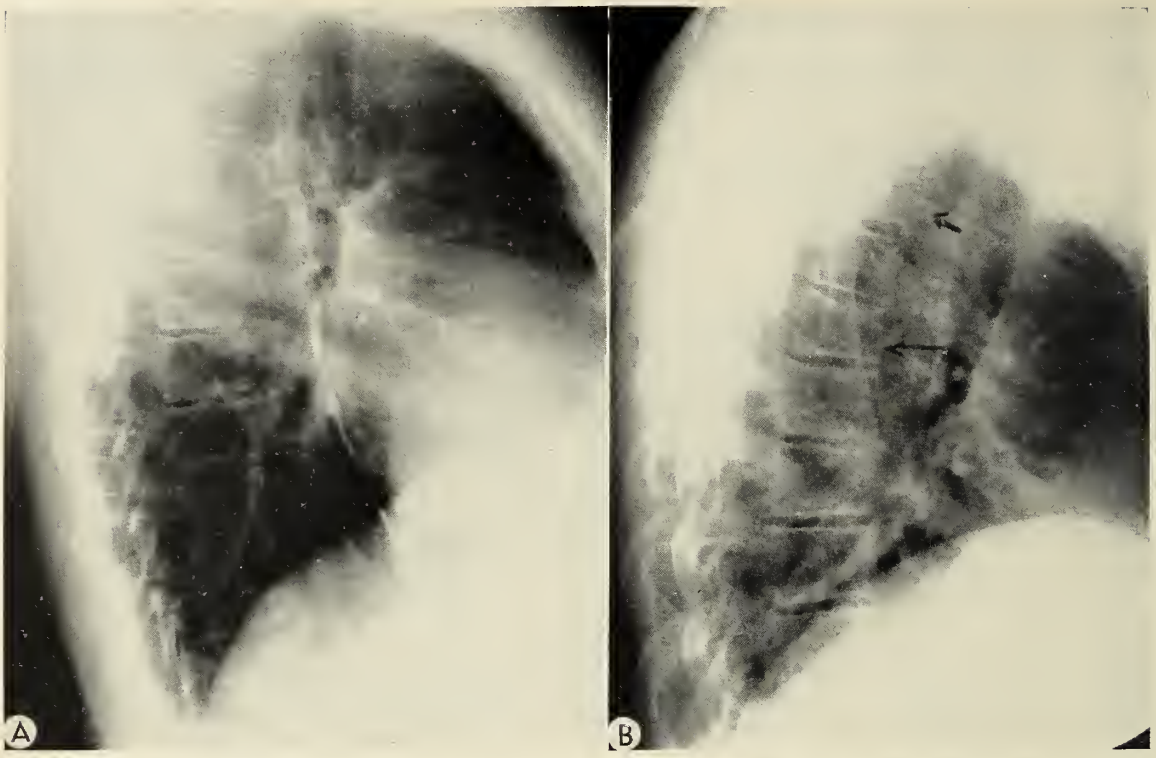


Fig. 2. (A) Radiograph taken on September 10, 1950, showing the patient's normal dorsal spine. (B) Film taken on October 6, 1950, showing the presence of compression fractures of the bodies of D-4 and D-6 subsequent to an unremembered convulsion caused by a "hidden" insulin reaction.

been observed in a significant number of diabetic patients; it is not an infrequent complication of insulin therapy and causes the doctor to feel that he is dealing with a labile diabetic. In Figure 1 is graphed the typical insulin, blood and urine sugar findings in one patient who had such a "hidden" reaction. In this individual, the insulin reaction which occurred was buried in sleep. Its recognition required the determination of blood sugars at frequent intervals particularly through the night.

An objective and striking example of the hidden insulin reaction can be demonstrated by review of a portion of the case history of a forty-seven-year-old dentist* who had been a known "labile" diabetic for seventeen years. At the time of his admission to Harper Hospital in September 1950 he was poorly controlled on a diet formula of protein 85 grams, carbohydrate 175 grams and fat 120 grams and some 105 units of PZI and crystalline insulin. He showed frequent hypoglycemic blood sugar levels followed by marked hyperglycemia. These occurred without apparent cause in spite of careful search for concealed infection and for other factors usually considered important in making a brittle diabetic even more brittle. The insulin dosage had been gradually reduced to 75 units of NPH insulin a.c. breakfast daily when the patient awoke at 6:30 a.m. on October 6, 1950 complaining of severe radicular pain about the upper back and chest. Clinical considerations included pleurisy and an acute coronary thrombosis, but on close study, a sore, severely bitten tongue was discovered. It is suggested that there had been a convulsion and subsequent x-ray examination of the spine revealed the presence of fresh compression fractures of the fourth and sixth dorsal vertebral bodies without evidence of other vertebral disease. The occurrence of such vertebral fractures has been a recognized danger of the use of insulin shock therapy and fitted well with the idea that the patient had had a convulsion. Review of the patient's previous and subsequent night blood sugar levels indicated the occurrence of hypoglycemic espisodes of severe enough degree to cause a major convulsion. Yet this intelligent patient,

(Continued on Page 1131)

*We are indebted to Dr. Alvin E. Price for the opportunity of seeing this patient in consultation and for the use of this material from his record.

Treatment of Diabetes by the General Practitioner

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DIABETES is most frequently diagnosed by the physician in general practice, and, in the majority of cases, the disease is treated by this same physician unless some complication arises. Because of the fact that complications are so common, so disabling, so irreversible in character, and even at times terminate fatally, it is extremely important that the physician who first makes the diagnosis and undertakes the treatment of these patients, should have a good basic understanding of the routine management of the disease, its course and its complications.

The diagnosis of diabetes is usually fairly simple. The classic symptoms of the disease are known to all physicians and most of the laity. The finding of sugar in the urine and a definite elevation of the fasting blood sugar completes the diagnosis in a majority of the cases. Occasionally in a pre-diabetic or borderline case, a glucose tolerance test may be necessary. Once the diagnosis has been established, the physician should take the time to briefly outline to the patient the cause of the disease. He should discuss with the patient the predisposing factors and the hereditary background of the condition. An explanation as to the causation of the presenting symptoms is often helpful and is appreciated by the patient.

A discussion of foods in general, and especially the composition of different foods and their caloric value is quite essential. The patient should be taught early the importance of the diet in his future treatment. The custom of handing the patient only a list of "foods to be avoided" is to be deplored. He should be told what to eat and how much to eat. If instruction in the use of weighed diets is not possible, carefully controlled measured diets should be outlined for each patient, and adherence to these be insisted upon by the physician. Many well balanced diets of different caloric values are now available to all physicians through the American Diabetes Association booklets, and can also be obtained from pharmaceutical houses engaged in the production of insulin. Many types of "exchange diets" also help to relieve the monotony of the diet. Patients that are started on diets which contain sufficient calories and with an ample variation of foods will, as a rule, adhere to their diets. An allowance of thirty calories per pound for a growing child and thirty to thirty-five calories per kilogram for an adult is usually adequate. The use of weighed diets is the most satisfactory. The patients who do weigh their foods, learn food values and the size of portions of foods, can vary the menu to suit their taste. They are also the patients who have the least trouble with Insulin reactions and glycosuria. Weighed diets are indicated in the treatment of all juvenile patients.

Regardless of the type of diet used, the patient must be impressed with the fact that adherence to a diet with a constant caloric intake is paramount in his treatment. He must also be impressed with the fact that the taking of insulin does not allow for more freedom in his diet, but in most instances requires even more strict attention to food because of the balancing of the food on one hand against insulin on the other hand. The use of insulin has given many patients a feeling of false security, to the extent that he gives little or no attention to other phases of his treatment, however every physician has known for many years that the administration of insulin does not prevent the development of complications of the disease later in life.

The use of "free diets" should be discouraged. What diabetic needs to be encouraged to eat more? If one practices the free diet method and the patient advised that hyperglycemia and glycosuria are of no importance, what is left for the physician to do? His only duties will be in the management of infections, the treatment of coma and the extending of sympathy to the patient when he develops his vascular complications later in life.

The family physician should teach the patient, on his first visit, the technique of testing the urine for sugar and acetone. With modern reagents at hand this is quite simple. Any office nurse can instruct the average patient how to make these tests in five minutes. Patients should be taught to make their tests, not only in the fasting state, but at different time periods during the day. They should also keep a daily record of their tests and bring these reports with them at the time of their next office call. Occasionally one finds a patient who tests too frequently or too near his meal time.

Read before the Detroit Diabetes Association. March, 1954.

This should be discouraged as such tests are misleading.

Should the new patient be an adult and his diabetes not too severe, and if he presents no complications, he should be given a trial diet alone for a week or so. If at the end of this time he returns to his physician and reports most of his urine tests as showing sugar, if he has lost further in weight and his blood sugars remain elevated, he will possibly need to take insulin to control his disease. The dosage can be increased at subsequent calls until most tests of the urine made throughout the day are sugar free. Following this a series of blood sugars made both fasting and post-prandial will allow for the selection of the proper type of insulin and then the exact dosage can be determined.

The juvenile diabetic should, if possible, be hospitalized as soon as the condition is diagnosed. This allows for better stabilization of the diabetes, and at the same time the parents may be instructed in dietary management, the administration of insulin and other details. During this same period while the child and the parents are in a receptive mood, much knowledge can be acquired which makes the routine of future management more satisfactory for all concerned. Instruction as to procedure necessary during infections, and the early symptoms of acidosis and its treatment, can be outlined to the family. Rules as to exercise, the recognition and treatment of hypoglycemia and other more common irregularities can be formulated.

The physician may at times have difficulty in selecting the proper type of insulin. Recently the tendency has been to place most patients on NPH insulin regardless of their age and the severity of the diabetes. This is not feasible in all cases, as the examination of the blood sugar and the urinary findings at different times throughout the 24 hour period indicates. Wide fluctuations in the blood sugars do occur and the spillover of sugar in the urine is excessive at various times. The rearrangement of the meal time and the uneven division of feedings will not always correct this fault. Frequently only fasting blood sugars are made, and urine tests made only in the morning upon arising. This does not give satisfactory information as to the state of control of the patient's diabetes; in fact it is quite misleading to both the doctor and the patient. This is one of the most common errors made by the man in general practice. This criterion of control may allow the patient to have severe diabetes about 18 hours out of every twenty-four. We should help to clear up this fallacy.

Many of the older patients with a mild diabetes can be easily controlled with a single dose of Protamine insulin per day. Some of the middle-age patients with a more severe diabetes require Protamine Zinc Insulin, NPH or Globin Insulin once or twice daily, and occasionally supplementary doses of unmodified insulin are necessary. The juvenile patients need either NPH or Protamine insulin, plus one or two doses of unmodified insulin each day. The physician in general practice should become acquainted with the "action-time" of each type of insulin and use it "tailor-made" to suit the patient if he can possibly do so. Certainly a universal insulin is not yet available.

The physician who undertakes to treat a diabetic patient accepts a lasting obligation. He must not only select the proper diet in the beginning, but make the necessary changes as the conditions vary. He must be certain that the patient is following his diet at least most of the time. The insulin requirement of many patients also changes from time to time. This can only be determined by regular and fairly frequent check-ups. These are carried out year after year, in order to obtain the state of control desired.

Occasionally one will see younger patients who have been under the care of their family physician for years but who have consulted him only when in trouble. Without supervision they have become careless as to diet, insulin administration and other details and often present some serious complications such as dwarfism, tuberculosis, retinal hemorrhages, blindness, hypertension, nephritis and Kimmelstiel-Wilson disease. Many of these might not have occurred had there been regular and frequent examinations by their physician. He could have given advice and help which might have prevented these complications. He must therefore insist that all patients have a routine examination at regular intervals.

Three years ago, I saw a boy twenty years of age who came in because of rapidly failing vision. He had developed his disease at three years of age. He had never had a blood sugar examination. Following the discovery of his diabetes his parents had taken him to the physician for only about six months. Following that time he had only seen his doctor when in trouble. He had not had an examination by his physician for over three years. His urine had not been tested for several years.

The boy had massive post-retinal hemorrhages in both eyes. His blood pressure was not elevated, he had no albuminuria and no impairment of kidney function. There was nothing to denote nephritis such as seen in most of these uncontrolled young diabetics. We felt therefore that his hemorrhages must have been due to his uncontrolled diabetes. During the past three years he has become totally blind, but his physical condition remains the same. This type of patient is most distressing to treat.

Frequently we see young diabetics whose disease was discovered between three and ten years of age. They may have good management for a period of from five to ten years. But then, at the age of puberty, they become very obstinate and difficult to manage. They refuse to cooperate with their physician and will not heed the advice of their parents. They disregard all of the rules and regulations which they have previously been taught to observe, with the administration of insulin being the only detail which they continue to carry out. They appear to do fairly well until the age of eighteen to twenty-five years, when they begin to show evidence of weight loss, fatigue and some impared vision. They surprisingly enough have not had too much difficulty with infections and aside from a few mild bouts of acidosis appear to have gone along fairly well. When they do present themselves for examination, one may find early lens changes, and on examination of the retinae, some slight sclerosis of the retinal vessels, and a few small aneurysimal hemorrhages. There may also be a few small cotton-ball lesions of retinitis. The blood pressure at such a time may be slightly elevated and albumin with a few red cells may be noted in the urine. This type of patient, if he again adheres to his diet, takes the proper type and amount of insulin, may arrest the condition at this stage; however, some of the patients, even though they do follow a careful routine have progressive changes in their eyes and kidneys. This patient may in the course of a year or two present an advanced Kimmelstiel-Wilson disease which may prove fatal in the course of six months to a few years. Because of the fact that this picture is seen so frequently, it behooves us to impress upon the general practitioner, if he elects to treat these patients, that he must see them frequently and insist upon their complete cooperation at all times, in order to prevent or delay these complications.

Every physician who, in the past, has treated these young diabetics over a period of twenty-five years or more realizes the value of good diabetic control over long periods of time. It is gratifying to see these young men and women who developed their diabetes in childhood without any complications after this long period of time. Physicians who make the statement that the degree of control of the diabetic state has nothing to do with the prevention of complications have not lived long enough, or close enough, with the patients of the two different groups to determine the value of good diabetic control over a long range period.

Diabetics of all ages need to see their physician at regular intervals. The juvenile patient particularly needs changes in his caloric intake and an increase in his insulin so he can be active and healthy and develop like a normal child. The older patients need regular and routine examinations for evidence of nephritis, coronary artery disease and the possible development of malignancy. They need attention to lesions of the feet and a careful study of their peripheral circulation several times a year. They are entitled to a complete physical checkup at least once a year. Careful examinations of their eyes should be made at even more frequent intervals. They should have a careful examination by their dentist and oculist twice a year. All patients past fifty years of age, regardless of their blood pressure and retinal findings, should have an electrocardiographic examination and a chest x-ray once a year.

Perhaps many of you feel that all of these procedures cannot be carried out by the general practitioner and that most of these examinations should be relegated to the physician who specializes in the treatment of diabetes. By the time these patients are seen by the specialist, however, many of the complications are present, and little can be done to relieve or to retard their future development. Most of the patients who now consult a specialist, have had ten or fifteen or more years of treatment.

My thought, therefore, is that the physicians who now make a speciality of the treatment of diabetes, and all members of the American Diabetes Association, should make every effort to bring out more frequently and more forcibly the essentials of good treatment of this disease to our fellow physician, the general practitioner.

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Studies on a Test for the Prediction of Diabetes Mellitus

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A LARGE proportion of presently non-diabetic individuals who have a family history of diabetes mellitus will eventually manifest the disease. It is conceivable that impairment of reserve islet-cell function may exist in such individuals even though carbohydrate tolerance can be demonstrated to be normal at the present time.

The present study was begun in 1950 with the following objectives:

1. To attempt to unmask the potential diabetic who manifests normal carbohydrate tolerance by present testing methods.

2. To determine whether or not the established diabetogenic activity of ACTH and/or cortisone could be used as a means of bringing to the surface a subclinical defect in the metabolism of carbohydrate.

It became necessary, as the initial step in this investigation, to establish a testing dose of either ACTH or cortisone which would not modify significantly carbohydrate tolerance in people without family histories of diabetes, but which would modify significantly carbohydrate tolerance of a considerable number of individuals with known family histories of diabetes mellitus. This has been accomplished and forms the basis of one of our major findings, namely, that 24 per cent of presently non-diabetic relatives of diabetics react to this test in a specific way while this same response is observed in the control group in but 3 per cent of subjects. As will be detailed below the total dose of cortisone employed in this test is 100 or 125 mg. of cortisone administered orally as two doses during an eight and one-half hour period prior to an oral glucose tolerance test.

This paper represents an abbreviated version of one presented on June 20, 1954 at the Annual Meeting of the American Diabetes Association in San Francisco: "An Approach to the Prediction of Diabetes Mellitus by Modification of the Glucose Tolerance Test with Cortisone" *Diabetes,* in press.

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Method of Investigation

Subjects.—Glucose tolerance tests were performed before and after the administration of corticotropin or cortisone in 152 ambulant, healthy, relatives of diabetic patients and in 50 normal control subjects without a known family history of diabetes. The relatives of diabetics were offspring, siblings, or parents of patients with diabetes. Medical students, physicians, dietitians, and other healthy individuals, each without a known family history of diabetes, were used as control subjects.

Glucose Tolerance Tests.—For three days preceding the first (baseline) glucose tolerance test, all subjects ingested a standard preparatory diet containing 300 grams of carbohydrate.[1] The oral glucose tolerance test was employed using 1.75 grams of glucose per kilogram of ideal body weight, calculated from subject's height and age. Venous blood was obtained in the fasting state and every half hour for three hours after the ingestion of glucose. Blood sugar was determined in duplicate by the Nelson modification of the Somogyi method,[2] yielding "true blood sugar" values. The normal range for the level of the fasting blood sugar is 70 to 100 mg. per 100 cc. of blood with this method.

After completion of the baseline glucose tolerance tests the subjects continued on their standard preparatory diets for lunch and dinner of that day. The next morning the second glucose tolerance test was done. This time, however, the subjects received the priming doses of cortisone. If the subject weighed less than 160 pounds he received orally 50 mg. of cortisone acetate eight and one-half hours and two hours preceding the ingestion of glucose. If he weighed more than 160 pounds he received 62.5 mg. of cortisone acetate orally at the same time intervals. The total number of subjects finally tested in this specific way was 130 (thirty-seven controls, seventy-five non-diabetic relatives of diabetic patients, and eighteen diabetics). Not included in the present report are data obtained with ACTH or with use of varying amounts of cortisone. However, baseline data ("unprimed" glucose tolerance tests) from the entire group (202 subjects) are recorded (Fig. 1) for the purpose of indicating the incidence of undetected diabetes among apparently healthy relatives of diabetic patients.

Interpretation of Glucose Tolerance Tests.—The criteria employed for the interpretation of the initial (precortisone) glucose tolerance test were similar to those of Mosenthal[3] and of Moyer and Womack.[4] These, as well as most other investigators, consider the two-hour blood sugar value as the critical one.

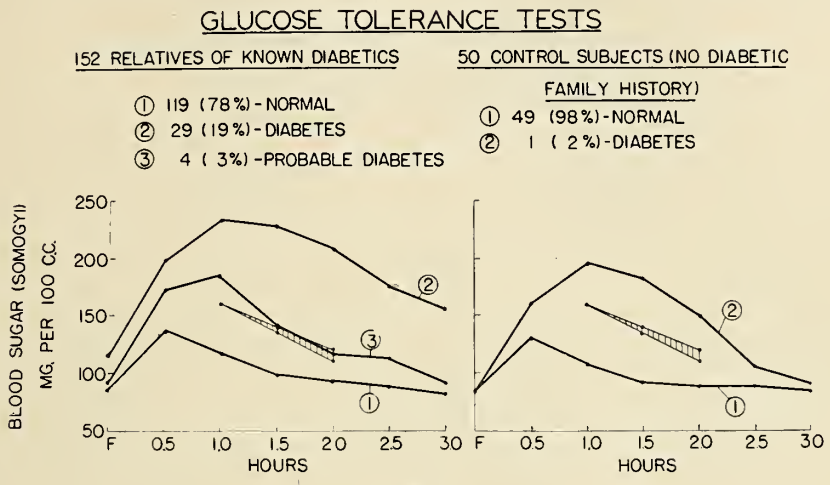


Fig. 1.

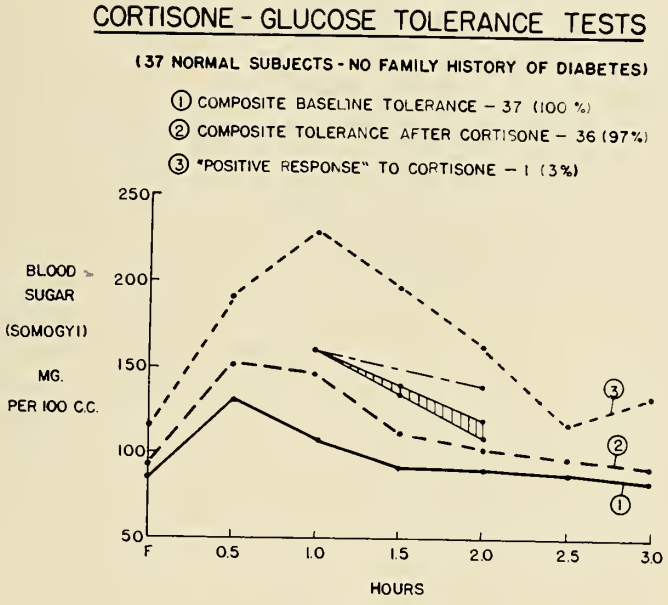


Fig. 2.

We regard the combination of a one-hour value of 160 mg. per cent or above, plus a two-hour value of 120 mg. per cent or above as diagnostic of the existence of the diabetic state. A diagnosis of "probable" diabetes was made when the one-hour value exceeded 160 mg. per cent and the two-hour value fell between 110 and 120 mg. per cent. In order to eliminate a false diagnosis of diabetes on the occasional curve which drops abruptly at 1.5 hours and rebounds above 120 mg. per cent by two hours we have added a third criterion, namely, that the level at 1.5 hours be 140 mg. per cent or above to be diagnostic. Figure 1 illustrates these criteria. A diabetic curve is one in which all points lie at, or above, the upper border of the cross-hatched triangle. A "probable" diabetic curve is one which lies at or above the lower border of the cross-hatched zone but in which the sugar level at two hours is between 110 and 120 mg. per cent.

We are convinced that when standard dietary preparation is employed and "true blood sugar" is measured these criteria are sound. Nevertheless,

some will regard them as insufficient evidence upon which to base a diagnosis of diabetes mellitus. If this can be proved, then our figures for incidence of fully developed. undetected diabetes in relatives

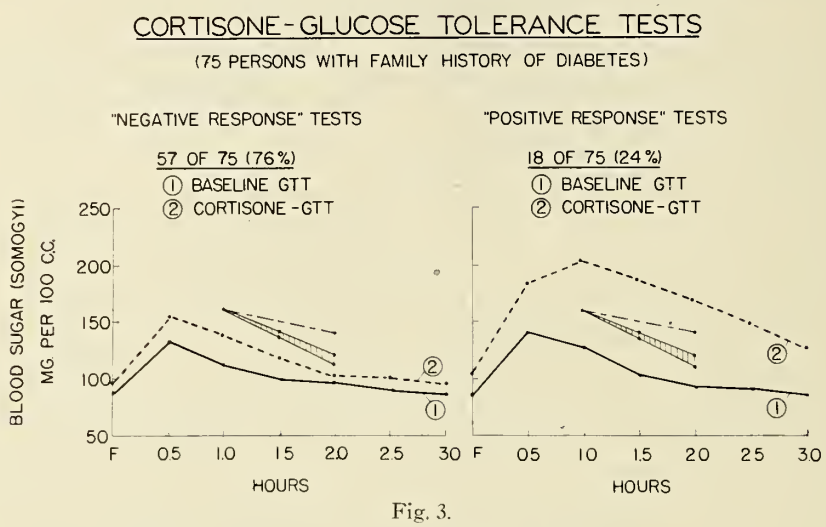


Fig. 3.

of diabetics would be too high. It is equally clear, however, that those relatives of diabetics whose tolerance curves fall *below* these levels would be called diabetic by no one. It is this specific group, which would not be called diabetic by any presently accepted criteria, that makes up the main interest of this communication. Can *this* group be split into two categories, one potentially diabetic and the other one not?

Results

Figure 1 shows the incidence of diabetes in subjects with and without a family history of diabetes. In the group of 152 relatives of diabetics, twenty-nine (19 per cent) were found to be diabetic on the initial test. This represents the incidence of unsuspected diabetes in this group. Using the same criteria in the control group only one (2 per cent) of fifty could be called diabetic.

Four more subjects (3 per cent) with positive family histories gave curves indicating "probable" diabetes while none in the control group had borderline curves. On Fig. 1 are shown the composite curves for these groups.

In thirty-seven of forty-nine normal control subjects (Fig. 2) the cortisone-glucose tolerance test (described under Methods) was performed. One individual showed a high curve (curve 3) and thirty-six gave low curves (composite curve 2). The mean two-hour blood sugar value of these thirty-six subjects was 103 mg. per cent with a standard deviation of 12.4 mg. per cent. Using three standard deviations from the mean as representing a high degree of significance, we set a level of 140 mg. per cent (103 plus 37) at two hours as the critical one for interpretation of the cortisone-glucose tolerance test. Thus a cortisone-glucose tolerance curve giving a two-hour blood sugar level of 140 mg. per cent or above represents a positive response while one below 140 mg. per cent is, for present purposes, regarded as a negative response. In the various figures the dashed line which connects a one-hour value of 160 mg. per cent with a two-hour value of 140 mg. per cent defines our criteria for a positive or negative cortisone-glucose tolerance test. Figure 2, then, shows the composite baseline glucose tolerance tests for the thirty-seven control subjects, the composite cortisone-glucose tolerance tests in the thirty-six individuals (97 per cent) with negative responses, and the curve for the one subject (3 per cent) with a positive response.

Cortisone-glucose tolerance tests were performed on seventy-five persons with a family history of diabetes but whose baseline glucose tolerance tests were *normal* (Fig. 3). Of the seventy-five individuals, fifty-seven (76 per cent) showed a negative response and a mean two-hour blood sugar level of 104 mg. per cent. This level is the same as that seen in 97 per cent of the control subjects during the cortisone-glucose tolerance test. Eighteen of the 75 (24 per cent) showed a positive response and a mean two-hour blood sugar level of 169 mg. per cent. It is interesting, at this point,

to observe that 32 per cent of those who gave a negative response and 11 per cent of those who gave a positive response were more than 15 per cent overweight.

glucose tolerance test. Two of the 12 diabetics showed no further elevation of the blood sugar level over baseline values during the cortisone test.

Figure 5 shows the composite curve of three

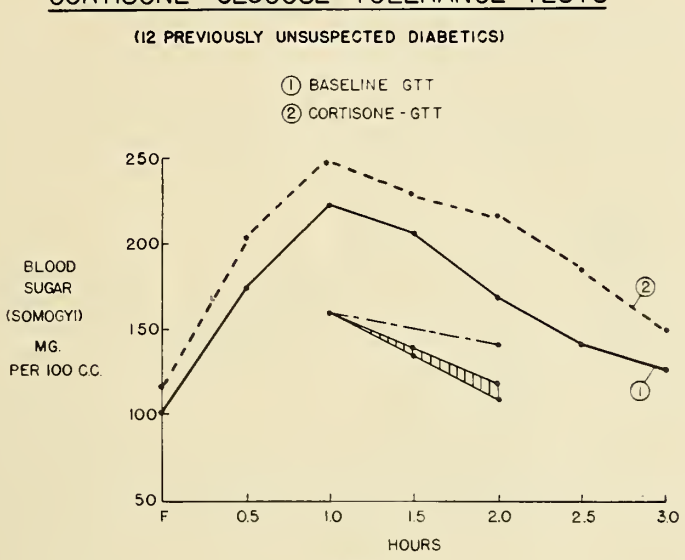


Fig. 4.

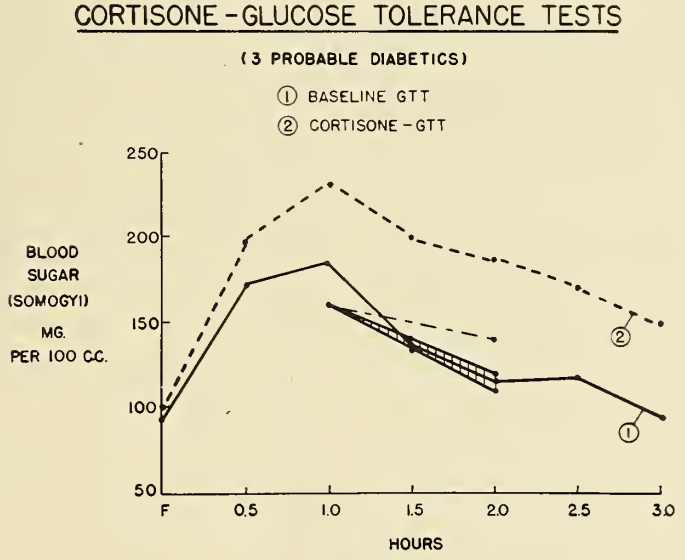


Fig. 5.

Cortisone-glucose tolerance tests were done on some of the subjects who were discovered to have diabetes on the initial glucose tolerance test. Fig. 4 shows the composite baseline and cortisone-glucose tolerance tests of twelve previously unsuspected diabetics. The mean two-hour blood sugar level of the baseline tests was 170 mg. per cent. It rose to 217 mg. per cent during the cortisone-

subjects classified by their initial glucose tolerance test as "probable" diabetics. The cortisone-glucose tolerance test was positive in all three, with a mean two-hour blood sugar level of 188 mg. per cent.

Figure 6 demonstrates data obtained in six obese, mild diabetics. Curve 1 shows the composite baseline glucose tolerance at the time of the initial

test. These patients were then fed low caloric diets and lost from 15 to 30 pounds of body weight. All of the six patients then exhibited normal glucose tolerance curves (curve 2). Cortisone-glucose tolerance tests were now performed. All demonstrated their defect by giving a positive response (curve 3). This latter curve is similar to that obtained in 24 per cent of people with family histories of diabetes whose baseline glucose tolerance curves are normal (see Figure 3).

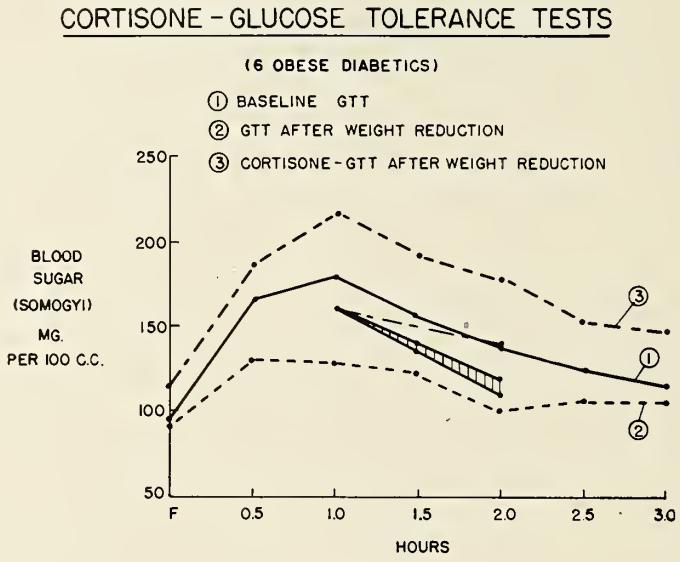


Fig. 6.

Discussion

It was surprising, indeed, to find that 19 per cent (or possibly 22 per cent) of apparently healthy relatives of diabetic patients were already diabetic by the same criteria that gave an incidence of 2 per cent in people without a known family history of diabetes.

However, this study was initiated to determine whether *potential* diabetes could be uncovered in the presence of normal carbohydrate tolerance by present testing methods. It seems very significant that 24 per cent of seventy-five non-diabetic relatives of diabetic patients show a response to the cortisone-glucose tolerance test which is distinctly different from the rest of that group; and that this abnormal response was observed in but one of thirty-seven (3 per cent) control subjects. It is important, too, that the abnormal cortisone-glucose tolerance response exhibited by 24 per cent of *non-diabetic* relatives of diabetics is the same response given by (1) the group with established diabetes, (2) the group with "probable" diabetes, and (3) the group of obese diabetics whose carbohydrate tolerance had returned to normal after reduction of body weight.

The remaining 76 per cent of non-diabetic relatives responded to the cortisone-glucose tolerance test as did 97 per cent of the normal controls with but minimal loss of carbohydrate tolerance.

Thus, on the basis of rigidly controlled experiments a test has been devised which separates into two distinct groups the presently non-diabetic relatives of diabetic patients. One group responds to this test as diabetics do and the other group responds as do the controls. Only the future incidence of clinical diabetes in the two groups, as well as in the control group, can prove whether or not the cortisone-glucose tolerance test as used in these studies, has value in predicting which non-diabetic members of a family tainted with the disease will eventually manifest it themselves. Such serial studies are already in progress but it probably will be many years before a definite answer becomes available. If research aimed at future prevention of diabetes is to be fruitful we must discover these individuals before their diabetes has become well established. It is our hope that this test will provide such a tool. Meanwhile the total series continues to be enlarged and work continues in several directions. Further study is needed, for example, of varying dose-time schedules with respect to administration of carbohydrate-active steroids. Insufficient steroid activity at a given

time may fail to disclose some subjects with a diabetic diathesis while excessive activity results in significant loss of carbohydrate tolerance in normal individuals.

Finally, one can merely speculate upon the possible modus operandi by which the cortisone-glucose tolerance test separates into two groups the presently non-diabetic relatives of diabetics. While far from proved, it may be that an insulogenic mechanism with marginal reserve function is sufficiently taxed by a small but sudden excess of 17-hydroxycorticoid activity that it temporarily decompensates.

Summary

1. Unsuspected diabetes was found in at least 19 per cent of 152 relatives of diabetic patients. Only one of the fifty control subjects demonstrated a diabetic glucose tolerance test.

2. Studies upon the non-diabetic relatives of diabetics comprise the major effort of this investigation. Glucose tolerance tests were repeated in 130 individuals (thirty-seven controls, seventy-five non-diabetic relatives of diabetics, and eighteen diabetics) after oral administration of 100 or 125 mg. of cortisone during an 8½-hour period immediately preceding the second test.

3. Twenty-four per cent of seventy-five non-diabetic relatives of diabetics showed marked loss of carbohydrate tolerance during the cortisone-glucose tolerance test. Only one of the 37 controls showed the same loss of carbohydrate tolerance.

4. With the same test similar loss of carbohydrate tolerance was found in: (a) The group with established diabetes, (b) The group with "probable" diabetes and (c) The group of obese diabetics whose carbohydrate tolerance had returned to normal after reduction of body weight.

5. Future follow-up studies will determine whether the non-diabetic individuals who gave positive responses to the cortisone-glucose tolerance test are indeed those who comprise our future diabetic population.

Acknowledgment

We are indebted to the Upjohn Company, Kalamazoo, Michigan, and to Merck & Company, Rahway, New Jersey, for the cortisone acetate used in these studies.

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HIDDEN INSULIN REACTION

(Continued from Page 1127)

who had experienced many insulin reactions during his waking hours, had absolutely no remembrance of this very severe reaction. There was a continuation of the erratic course and blood sugar pattern until the insulin dosage had been reduced to less than 50 units per day.

Discussion and Conclusion

The unrecognized nocturnal hypoglycemia herein characterized as the "hidden" insulin reaction represents only one factor in the much larger problem of lability in diabetes. With increasing use of longer lasting insulins, it has appeared that such "hidden" reactions are occurring with greater frequency and that this phenomenon might well be called to general medical attention. A more complete presentation is planned to discuss mechanisms involved. At present, alterations in therapy, suggested by the presence of nocturnal hypoglycemic episodes with subsequent hyperglycemia are:

1. A definite reduction in the total insulin dose with probable changes in proportions of long and short acting insulin and in the time of administration. Such problems can be controlled by splitting the total daily HDH dose into two parts—one at breakfast and one at supper.

2. Adjustment in the dietary prescription allowing redistribution of the available glucose with provision of more slowly absorbed sources of glucose as are found in milk and cheese as opposed to fruit juices. Such changes would tend to support the blood sugar levels in the early morning hours. Again, it is important to recognize that a high afternoon blood sugar level may not always be due to too little insulin. One must look for the "hidden" insulin reaction in a patient having such a high blood sugar level. The proof of such occurrence requires the determination of blood sugars at frequent intervals during the night and the attendant increased cooperation on the part of house staff, laboratory personnel, and last, but certainly not least, the patient.

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Posterior Pituitary Hormone as a Factor in Insulin Resistant Diabetes

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WE are all acquainted with cases of insulin-resistant diabetic patients. There have been various explanations for this, such as overactivity of the anterior pituitary gland, and the adrenal cortex. No doubt these do play a role, but the posterior pituitary factor, has not, as far as I am aware, been sufficiently stressed. Certain physiological and pharmacological effects are of importance. It has been shown that posterior pituitary extract raises blood sugar.[1,2] It also neutralizes the effect of insulin, that is, when posterior pituitary extract is given at the same time as insulin then no fall or a negligible fall of blood sugar takes place.[2,3,5,11] Animals that receive either fatal doses of insulin or a sufficient amount to produce convulsions can be saved from a fatal outcome or the convulsions can be stopped by injections of posterior pituitary extract.[8] It is believed that the sugar which overcomes the aforementioned conditions is derived from the liver.[10] Posterior lobe extract also causes an elevation of inorganic phosphate in the blood in opposition to insulin.[10] It may be said that this is due to the anterior pituitary overactivity with its diabetogenic effect and a final exhaustion of the pancreatic insulin islet cells from the constant pituitary stimulation.

However the posterior lobe may well be an additional factor in producing insulin-resistant diabetes. If this is true then the whole pituitary gland is to blame for insulin resistance. It is of interest that posterior lobe hormone is secreted in greatest amount at night when its antidiuretic activity is also the greatest producing the nocturnal concentration of urine.[6]

That the whole pituitary is concerned with polyuria and polydipsia of diabetes seems a reasonable assumption. Of course the adrenal cortex is a large factor in this but our concern is the posterior pituitary factor in insulin-resistant diabetes.

Clinical observations strongly suggest the reason why some individuals are insulin resistant and we may learn from these observations just how this is brought about. As an example, diabetes mellitus associated with thyrotoxicosis, especially severe and uncontrolled, gives valuable information as to the mechanism of insulin resistance. The primary stimulus of the thyroid hormone to the brain, and to the pituitary and for present purposes the neuro-ectodermal posterior lobe, results in an outpouring of the posterior lobe insulin-counteracting hormone. We have a right to assume that since the thyroid stimulates nervous tissue it would *pari-passu* stimulate the nervous tissue of the posterior lobe. Carrying this a step further, the thyroid hormone also stimulates the nervous tissue of the adrenal medulla or as we know it, the chromaffin tissue, and the whole sympathetic system. Here then is another insulin inhibitor namely, the secretion of the adrenal medulla, epinephrine. As we know epinephrine also overcomes insulin hypoglycemia.

The sequence of events in thyrotoxicosis would be as follows: Thyroid stimulus to ectodermal adrenal medulla with epinephrine release, thence to the brain, hypothalamus, neuro-ectodermal posterior pituitary lobe, anterior pituitary lobe and thence the mesodermal adrenal cortex—all these factors would be in opposition to insulin. It is well known that the thyroid stimulates the adrenal medulla and that the adrenal medulla secretion, epinephrine, stimulates the thyroid, a reciprocal relationship. While my purpose is to show the posterior pituitary hormone is an insulin inhibitor and thus help produce an insulin resistant diabetes, I am cognizant that other factors play their part in producing this. Were we to use the same example of an uncontrolled thyrotoxic individual with insulin resistant diabetes mellitus it can be shown that embryology assists us in understanding how this is accomplished. The thyroid influences ectodermal tissues and if this is true then the thyroid secretion would activate the ectodermal nervous tissue, which for purposes under discussion would be the hypothalamus; the ectodermal anterior and posterior pituitary lobes, the ectodermal adrenal medulla and the ectodermal sympathetic-parasympathetic systems. I merely mention in this connection that the pituitary despite its ectodermal origin influences mainly mesodermal tissues, which again for present purposes we emphasize that the adrenal cortex in contrast to its neighboring ectodermal medulla, is of mesodermal origin.

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Another step in physiological selective embryological relationships is the effect of posterior lobe hormone on certain mesodermal tissue derivatives. On injection, extract of the posterior pituitary produces vasoconstriction of the mesodermal blood vessels; contraction of the mesodermal smooth muscles of the bladder, uterus, intestine, gall bladder and elsewhere; it produces antidiuresis by its effect on the mesodermal kidney, and it produces an expansion of the mesodermal melanophores.

It is therefore important to bear in mind the insulin inhibitor effects of the posterior pituitary hormone in insulin-resistant diabetes mellitus. So far we have not found an antagonist to the posterior lobe hormone but physiology would suggest that in the female corpus luteum hormone or progesterone would be antagonistic to the posterior pituitary hormone. No such antagonism exists in the male. It is to be hoped that physiological chemists will find an antagonist to the posterior lobe hormone and thus overcome this factor in insulin-resistant diabetes.

It may well be that such a discovery may diminish the tendency to diabetic arteriosclerosis, since it would overcome the vasoconstrictor effect of posterior lobe secretion. Many years ago Osius and I[7,9] fed rabbits on a high cholesterol diet and daily injections of posterior lobe extract. These animals showed marked atherosclerotic changes in the vessels, almost to the occlusion stage of the coronary arteries. This was in contrast to the control group, the group on high fat alone, and on posterior pituitary extract alone, the latter two groups showed about equal changes. If applied to the human this would give the posterior lobe a place in the production of arteriosclerosis in general and specifically in this instance, in diabetes mellitus.

Summary

The article stresses that the posterior pituitary hormone is a factor in insulin-resistant diabetes. Clinical, pharmacologic and experimental work show that the posterior lobe hormone is an inhibitor of insulin.

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TAXES FOR FOREIGN AID

During the ten-year period since the close of World War II, American taxpayers have "contributed" the equivalent of one year's total federal tax revenues to the so-called foreign aid program. Incidentally much of this has ostensibly been for the purpose of combatting the very Communist forces we helped build up.

The total foreign aid voted for the fiscal years 1946 to 1955 is some $69 billion. Because of this generosity was practiced with borrowed money under our system of deficit financing, more than a billion dollars in interest charges must be added to this figure. It is interesting to note that the toal federal revenues colleced by our government in fiscal year 1953 was just over $70 billion.

Another startling comparison brings the facts even closer home.

Michigan's share of the $69 billion of foreign aid voted in the past ten years has been $3,456,000. In 1953 the total state taxes collected in Michigan for state purposes was $582,444,000.

This means that Michigan taxpayers' share of the foreign give-away program in the past decade is the equivalent of the total state taxes collected for use in Michigan for a period of approximately six years.

This is a high price to pay for a program which has "bought" none of the benefits promised by the advocates of foreign aid.—Paul Shafer, Congressman Michigan, last official letter.

"What's New, Doctor, That You Can Use?"

That's the theme of a **great medical meeting.**

The 1955 **Michigan Clinical Institute** will offer something new in postgraduate medical education.

The 1955 **Michigan Clinical Institute** will present tools developed during the past 365 days . . . that are useful to you, Doctor . . . for your daily practice, made for you to use in behalf of your patients.

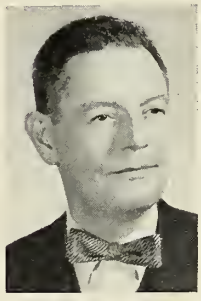
The 1955 **Michigan Clinical Institute** will show you the way you can use today's tools; their limitations; their dangers; their merits.

The 1955 **Michigan Clinical Institute** will bring forth a new project. The purpose is to return everything to the practicing doctor of medicine —the front line doctor, not the M.D. in the research laboratory, but the medical worker in his office and in the patient's home. All medical problems first are seen by the practicing M.D.; all medical problems for their end result go back to the practicing M.D.

The 1955 **Michigan Clinical Institute,** therefore, will lay before the medical practitioner a handy, accurate down-to-earth summary of the various problems his patients present to him.

The 1955 **Michigan Clinical Institute** will be a new departure in postgraduate medical teaching. Outline of the program will be published in the November JOURNAL; the complete program (including résumés of all papers) will be published in The JOURNAL's M.C.I. issue (December).

Some of the thirty-eight subjects at the 1955 **Michigan Clinical Institute** suggest its modern, practical approach:



THOS. B. QUIGLEY, M.D.

"Use of Plaster in Common Injuries" (This intensely interesting color television presentation will be made by Thomas B. Quigley, M.D., Surgeon, Peter Bent Brigham Hospital, Boston), "Treatment of Fractures," "Prevention of Accidental Trauma," "The Newer Drugs in the Treatment of Malignancy," "The Management of Prematures," "The Significance of the Retention of Fetal Positions," "Hormonal Therapy," "Polio Vaccine," "Vascular Disease," "The Stress Syndrome," "Hypertension," "Heart Surgery," "Treatment of Rheumatic Fever with Gentisates," "Allergy," "Eye Changes in Systemic Disease," "Sinus Disease," "What's New in Psychiatry," "The Family Physician in Obstetrics," "Antibiotic Therapy in Urinary Tract Infections."

In all, forty-six teachers and clinicians will tell the story of "What's New, Doctor, That You Can Use?"

Doctor, schedule your time now to attend the 1955 **Michigan Clinical Institute,** Sheraton-Cadillac Hotel, Detroit, March 9-10-11, 1955. Write for hotel reservations to Committee on Hotels, Michigan Clinical Institute, W. L. Stodghill, secretary, Sheraton-Cadillac Hotel, Detroit.

What's New, Doctor, That You Can Use?

POSTGRADUATE CLINIC

The Michigan Academy of General Practice Postgraduate Clinic at the Sheraton Cadillac Hotel, Detroit, November 10-11, 1954, will feature W. B. Hildebrand, M.D., of Menasha, Wisconsin, President of the American Academy of General Practice, and Paul Williamson, M.D., Memphis, Tennessee, on "Future of the Family Physician."

Among speakers on the scientific program are Jerome Glaser, M.D., Rochester, New York; Edward Henderson, M.D., Montclair, New Jersey; C. J. O'Donovan, M.D., San Juan, Puerto Rico; Kenneth W. Thompson, M.D., Orange, New Jersey; Frank A. Finnerty, Jr., M.D., Washington, D. C.; Carl A. Bunde, M.D., Oklahoma City, Oklahoma; James L. Dennis, M.D., Galveston, Texas; Perry S. MacNeal, M.D., Philadelphia, Pennsylvania; Burton A. Waisbren, M.D., Milwaukee, Wisconsin; Benjamin M. Kagan, M.D., Chicago, Illinois; Julius Pomeranze, M.D., New York, N. Y.

Progress from Cooperation

Your new President welcomes this opportunity to thank the members of the Michigan State Medical Society for the honor and privilege of representing them in this official capacity. I assume the office with full knowledge of the long list of my distinguished predecessors, and with all humility, I shall attempt to represent the Society with dignity and achievement.

Michigan State Medical Society has had a distinguished record of progress and leadership in the profession of our State and nationwide. This has been accomplished through foresight and cooperation of its officers and committees over past years. Our House of Delegates, a truly representative body, has determined the pattern and policies with deliberation. And a training pattern has evolved that has served us well in the election of our officers. The work of the Society, both organizational and scientific, has been ably and faithfully promoted by over 300 members who serve on the Standing Committees and by some 200 additional members who assist the Council on special Council-appointed committees.

The Council may be proud in having selected an efficient Executive Director and staff. All these factors have become part of our wheel of progress.

It is, indeed, a pleasure and privilege to be but one cog in this wheel to represent, as President, such an alert and progressive organization in its progress toward the best in medicine for the profession and the public.

President's Message



Robert H. Baker

President, Michigan State Medical Society

Editorial

MEDICAL EDUCATION

"I swear by Apollo, the physician, and Aesculapius . . . to teach them this Art if they shall wish to learn it, without fee . . . and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the Art to my own sons and those of my teachers and disciples . . ."

SUCH is the opening statement of the Hippocratic Oath, which every doctor of medicine is supposed to have taken. This is one precept of several which are binding on those who profess to be true followers of the great teacher.

Attempting to learn how well our Michigan members have carried out their obligations, a survey was conducted which gave us some valuable information. The limited replies to a questionnaire reported that our individual members are providing support in whole for fifty-eight students, in part for twenty-two students. Fifty-five of these students are taking the M.D. courses. Support is also reported for twenty-three student nurses, seven dentists, one veterinary medicine student. Eighty-six replies were studied. This represents a very satisfactory condition, but not nearly enough are responding.

We have, however, received two detailed reports from the American Medical Educational Foundation. One contains a listing of each doctor who has contributed during 1953 to this fund, either directly to the AMA, or to his choice of medical schools. One hundred and thirty-one Michigan doctors gave $7,771.00 directly through the AMA; fifty-two doctors (from everywhere) gave $2,855.00 to the University of Michigan; and 467 gave $31,322.33 to Wayne University (soliciting for a Medical Library for the new college center).

Michigan doctors gave directly to thirty-seven different medical schools: to Wayne, 349; to Harvard, thirty-eight; Johns Hopkins, thirty-six; University of Michigan, twenty-eight; Jefferson, twenty-eight; Marquette, twenty-eight; Western Reserve, twenty-seven; Northwestern, twenty-four; Cincinnatti, nineteen; Loyola, sixteen; Louisville, fifteen; Dartmouth, fourteen; Pennsylvania, fourteen; Duke, nine; Boston, eight; Buffalo, 8; St. Louis, seven; Yale, six; Tulane, six; Rochester, six; Kansas, five; Creighton, five; Oregon, five; Virginia, 5; New York University, four; Women's Medical College of Pennsylvania, four; Tufts, three; Pittsburg, three; Georgetown, two; Chicago Med., two; Cornell, two; Vanderbilt, two; Vermont, two, and Minnesota, Albany, State University of New York and Tennessee, one each.

This is a very imposing record, but if the education of medical students in the United States is to be kept in private, rather than federal, control we must do even better.

MEDICINE AND SOCIAL SECURITY

THE medical profession has been opposed to certain features of the Social Security national legislation. We believed some features to be uneconomic and some definitely not suited to our requirements. Some we believed would retard the enactment of legislative programs which would much more easily meet our needs, especially in the matter of retirement.

The new amendments just enacted by the eighty-third Congress have made some very radical changes in the law. We believe our members will be interested and should study these features in considering what our next action will be. There definitely will be further action, because President Eisenhower, speaking in a nationwide radio-television program three days after Congress adjourned, promised to ask the next Congress to include doctors of medicine, osteopaths, dentists, chiropractors, veterinarians, naturopaths, and optometrists who are excluded this year.

Arguments Favoring Including Physicians

Arguments favoring including physicians are:

"A person is fully insured when he dies or reaches age sixty-five, if at any time in his life he has had at least one-quarter of coverage for every two calendar quarters after 1950. In any case, a worker must have had at least six quarters of coverage. When he has forty quarters of coverage, a worker is fully insured for life."

Under the new amendments which will go into effect January 1, 1955, the physician, if included, might expect to benefit in proportion to the length of time he has been a contributor, but the maximum will be $108.50 per month, assuming that

he had paid on earnings of the new rate of $350.00 per month. This retirement pay is subject to concellation if the recipient earns $100 any month or $1,200 during the year. This forfeiture holds under the present law to age seventy-five, after which a person may earn as much as he can. The new law has reduced this age of exemption to seventy-two. We believe this penalty should be completely removed.

For a person who becomes disabled or unfit for work, under sixty-five years there is no benefit. After reaching sixty-five, he may draw payments based on averaging the last ten years. The new law allows four years to be deducted in the last ten, unless he has earlier in his life amassed forty quarters of coverage.

A widow with dependent children under eighteen can benefit in scheduled amounts which may reach as high as $200.00.

"In 1954-1959, cost to the self-employed is $108.00 *annually,* payable in connection with federal income tax. The amount increases to $135 from 1960-64, to $162 in 1965-69, and $175.50 in 1970. Considering the investment of money involved and the returns from that investment, the proposition is a good one for either the older doctor or the young doctor—based on the income from either the retirement feature, or the income protection given the doctor's survivors under the plan."

Opposition to Including Physicians

Arguments against the joining of the Social Security program have been chiefly from the philosophical point that:

"Long term results of a trend toward Big Pensions and its sponsor Big Government are to be feared. Rewards by government for long life to all the people begins a leveling or averaging process that destroys individuality and initiative. It encourages the welfare state by placing responsibility for a great portion of our people solely in the hands of government."

Physicians believe the social security program might defer the plans which they have been advocating for many years to enact laws similar to those in force for years as regards business. The Reed-Keough-Jenkins bills proposed in recent years would allow us to plan our own retirement with better success, and in the long run, much better benefits. We believe *we* should at least be given rights equal to those of men in business and industry.

"Since approximately 50 per cent of physicians who retire after sixty-five do so after the age of seventy-four, this high percentage of retiring physicians would be required to make OASI payments to age seventy-two before they would receive any benefits (other than the survivors protection afforded their families). The plan is compulsory and does not "fit" the professional man. It may militate against the establishment of a voluntary plan, with tax deferments permitted, which is to be preferred over the compulsory plan. The plan is not based on insurance principles. It is wrong in principle from the standpoint of American traditions for it ultimately will place more government taxes on and controls over a free people."

We anticipate the next Congress will decide our ultimate inclusion or exclusion. Doctors of medicine and the other allied groups must decide. There are many arguments which must be considered. We have presented some of them here and over the years.

We accept Social Security for the nation as an accomplished fact. We believe some points should be improved. Make it voluntary for the self-employed; eliminate the penalty for working after having earned the pensions; eliminate Section 106 placing restrictions on the medical profession for certifying disability. There are enough safeguards in that division now.

The new law has many acceptable features for the self-employed that can easily be accepted, but should be voluntary.

REINSURANCE

IN the next Congress the medical profession must again be interested in the problem of "reinsurance." Last January, the President proposed a plan which has been advertised as allowing the nonprofit and voluntary plans to furnish health insurance to groups of people not now covered, and who under ordinary terms could not be insured. This sounded wonderful, but the bill as presented was far short. It actually was not reinsurance at all. It proposed a scheme whereby voluntary health plans which desired to cover new groups, or groups without sufficient experience, could apply to the Health, Education and Welfare department and after certain preliminaries and surveys be accepted for "reinsurance." The rate to be charged would be determined and insurance issued. This rate would be subject to revision at the end of three months.

The bill also provides that at the end of five years these insurance rates must have paid back the $25,000,000 advanced, together with interest and the bureaucratic expense of operation. The Government did not intend to lose by the plan. The

controls would hamper private enterprise and might result in federal absorption of the plans if reinsurance experiences were adverse.

The President has promised to reintroduce his plan. Again we will have to study its merits and maybe again urge that it be returned to the Committee. The plan so far outlined is absolutely unnecessary. Reinsurance is now in existence for health and accident policies, and has been successfully operated since 1915, and quite extensively since 1928. Blue Cross and Blue Shield have been providing reinsurance for nationwide coverage for some time. This could be extended if needed to cover any program contemplated.

There is a field of "reinsurance" which the Federal government might well investigate. The Veterans Administration is operating an essential reinsurance for veterans with service connected disabilities, providing home town care. This is the well known Michigan Plan now in operation quite generally. Veterans authorized for care may go to their own doctor. In our state the report is sent to Michigan Medical Service and paid. The assembled bills are then sent to the Veterans Administration with the addition of a service charge. In other words, the Veterans Administration makes post payments for this authorized care of veterans.

There are many people medically indigent or totally indigent who are essentially wards of the Government. Their care is now arranged for under the Michigan Department of Social Welfare, matching funds from the Federal Government. We believe authorization could be made by the Federal Government allowing the Social Welfare departments to take advantage of the insurance principle, and purchase coverage for their people. Or an arrangement could undoubtedly be made for a cost-plus plan similar to our Veterans Administration plan. We doubt if any private agency like MMS could finance this whole program as we are doing in the case of the veterans. There is, however, a possibility of co-operation and care for the unusual or impossible cases which the President wishes covered by his "reinsurance."

We believe it would be possible to formulate plans which would definitely not involve a subsidy, and yet extend health care to vast numbers who are not now able to buy their own insurance. Those are the people indicated by the proposed "reinsurance." They are definitely not included in the bills which were proposed.

ANOTHER FIRST?

IN the September, 1953, issue of THE JOURNAL of the Michigan State Medical Society we published an editorial of that title, ending with a question. We received a letter the last of August from C. C. Vermillion, M.D., associate director of Barnes Hospital, St. Louis, Missouri, questioning our priority. We submitted this letter and much material accompanying it to Vergil Slee, M.D., Hastings, who was directing the study to which we referred. We have asked Dr. Slee for an account of the work and objectives of his group, but this gives us an opportunity to give a formal reply as well as to give our readers some very interesting information of a research going on in our midst. That accounts for the two long letters in our Communications department.

CREDITS

THIS Diabetes number of THE JOURNAL owes much of its material to the voluntary and untiring efforts of William M. Le Fevre, M.D Councilor of the Eleventh District, and an outstanding leader in the State Medical Society's work on diabetes detection and prevention. We thank you, Bill.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 1072)

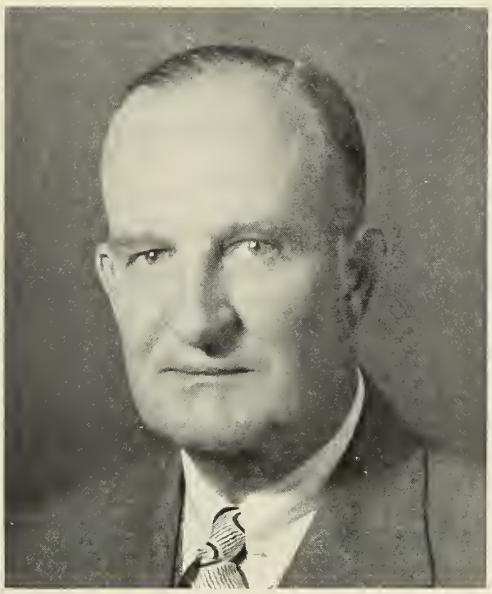
included a report on progress of good citizenship campaign and the making of three experimental sound-color television films—the first on "Medical Associates"—the report commented on the generous television and radio coverage of the Beaumont Memorial Dedication and the fine cooperation of the University of Michigan in this activity and stated that the St. Joseph County Medical Society has been successful in establishing a Medical Examiner System for its area, based on the enabling legislation sponsored by MSMS in 1953; on Michigan State College's new medical assistants courses.

- **A standing vote** of thanks was extended to Dr. and Mrs. Baker for their hospitality on this occasion. At dinner, John W. Paynter, Detroit, President of Michigan Hospital Service, joined the Executive Committee of the Council.

I Will Lift Up Mine Eyes . . .

Howard Philip Doub, M.D.

Howard Philip Doub saw the light of day for the first time on the broad, gentle, rolling slopes of the great Cumberland Valley (sometimes called the Hagerstown Valley) in the Old-Line State—Maryland. This portion of Maryland lies within the Appalachian Region and is part of the historic Shenandoah. It is no doubt from these hills and valleys that Howard Doub acquired the gentleness, serenity and strength which have been the fundamental principles in his successful life.



Howard Doub attended Western Maryland College, a well-known, but small, Methodist College located in Westminster, Maryland, from which he graduated in 1913. He matriculated in Johns Hopkins Medical School and received his medical degree in 1917. He received his formal training in radiology at Johns Hopkins in 1917-1918 and then migrated to Michigan. In a short time he became the Associate Radiologist at Grace Hospital, Detroit.

With his formal education completed, his thoughts turned to his romantic choice, the charming Helen Ringrose—also a native of Maryland—whom he met at Western Maryland College, and the Ringrose-Doub romance blossomed into marriage in 1919.

My first introduction to Howard Doub was in the year 1923 when he came to the University Hospital, Ann Arbor, to inspect the x-ray departments and examine their methods of keeping records. I was impressed with his meticulousness and thoroughness in detailed planning.

It was in the same year that Howard Doub, at the age of 32, became the "Chief" in Radiology at the Henry Ford Hospital. You will recall that the Henry Ford Hospital, at its inception, was staffed only with Johns Hopkins graduates. As this was one of Dr. Doub's many qualifications he received the appointment, and as a result of this appointment as Chief in Radiology at the Henry Ford Hospital many physicians in Michigan know Howard Doub only as "The Chief."

With his continued work at this great hospital Dr. Doub has become a radiologist of international renown. Yet, if you talk to this Michigan (by adoption and choice) radiologist you will realize that in his opinion he was chosen to be the 31st President of the American College of Radiology simply to perpetuate a Michigan tradition. It is true, two other Michigan radiologists both had held this honor and distinction, but those of us who know the high standards of the College and the exacting requirements of its members, fellows and officers, realize that Howard Doub, as the third President from Michigan, is adding glory to the College.

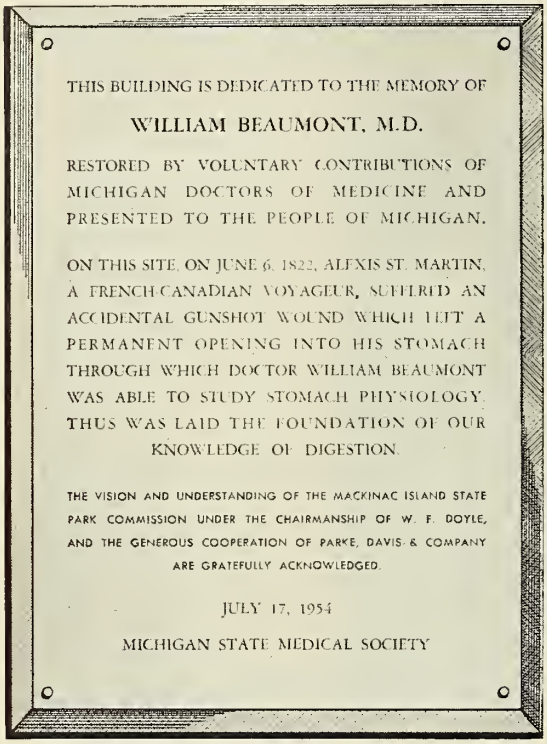
One of Howard's great moments occurred at the 1954 Michigan Clinical Institute. Along with Eugene Pendergrass, M.D., a guest speaker at the meeting, Howard received a scroll from the Michigan State Medical Society in recognition of his radiological contributions and honors, and he unhesitatingly tells one that "this is the proudest achievement of my career." He has written literally hundreds of scientific articles for medical journals, and as editor of the magazine "Radiology" has many outstanding editorials to his credit. It is indeed nice to know that Howard is still in his prime and that we can expect many more contributions from him to the field of radiology.

Howard Doub has other interests over and above medical procedures. He enjoys photography, loves to hunt and really exercises on the golf course. Here is an incident of years ago: The late Dr. Bob Funston accused him, in a foursome, of lifting up his eyes onto the hills, and in so doing his golf

(Continued on Page 1145)

The Beaumont Memorial

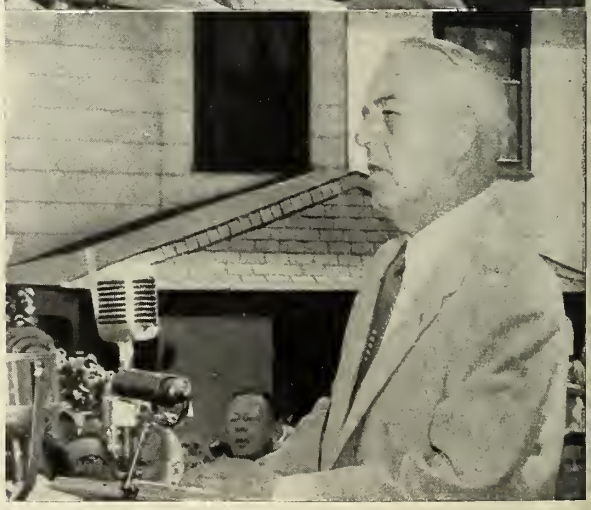
On July 17, 1954, in Mackinac Island State Park, Michigan's doctors of medicine dedicated The Beaumont Memorial and gave it to the people of Michigan as a historic landmark and as a monument to medical progress through research. Many years of planning and work by MSMS members lie behind this lasting tribute to William Beaumont, M.D., reconstructed on the site where he began his epic experiments with Alexis St. Martin. Here are some highlights of the dedication.











New Shrine Symbolizes Medical Progress





Opposite page.—(Upper left) Memorial plaque. (Lower left) Representing the Army at the dedication was **Brig. Gen. Elbert DeCoursey, M.D.**, director of the Armed Forces Institute of Pathology, Washington, D. C. Here he chats with **Dr. Scheele** (left). (Upper right) The Beaumont Memorial. (Center) "The Beaumont Memorial symbolizes the advances made against disease and death because of the joint effort of physician and scientist," **Leonard A. Scheele, M.D.**, Surgeon General of the U. S. Public Health Service, said in his dedication address. (Lower right) **Otto O. Beck, M.D.**, Birmingham, chairman of the Beaumont committee, was in charge of ceremonies.

This page.—(Upper right) Climax of the dedication came when **L. W. Hull, M.D.** (right), of Detroit, President of MSMS, presented **W. F. Doyle** (left) with a conveyance giving the Beaumont Memorial permanently to the people of Michigan. The document is now in the treasured archives of the State. (Right center) **W. F. Doyle**, Resident Commissioner of the Mackinac Island State Park Commission, and former Commission Chairman, expressed gratitude in behalf of Michigan's citizens. Behind Doyle are (left to right) **Leslie O'Brien**, Mayor of Mackinac Island, **Mrs. Curran P. Boyer**, president of the Historical Society of Michigan, and **Brig. Gen. DeCoursey.** (Bottom) The evening preceding the dedication members of the Memorial Committee held a windup session at Grand Hotel. Seated, left to right, are: **Professor Emil Lorch, AIA; L. J. Hirschman, M.D., Otto O. Beck, M.D.**, chairman; **Homer A. Fritsch**, representing **H. J. Loynd**, president of Parke, Davis & Co.; and **J. H. Fyvie, M.D.** Standing are, left to right: **C. T. Ekelund, M.D.; W. F. Doyle; W. S. Jones, M.D.; A. H. Whittaker, M.D.** and **William M. LeFevre, M.D.** Not pictured are **F. A. Coller, M.D.**, and **S. W. Hoobler, M.D.**





Three of the most interested guests at the Beaumont Memorial ceremonies are shown above with Dr. Scheele. Pictured left to right are **Mrs. George Brotherton** of Green Bay, Wisconsin, **Dr. Scheele, Mrs. George C. Stokes** of Flint, and **Mrs. Otto Brown** of Stambaugh. Mrs. Brotherton and Mrs. Brown, sisters, are great-granddaughters of Dr. Beaumont, and Mrs. Stokes is a great-grandniece. Behind the guests is the Dean Cornwall painting of Dr. Beaumont and St. Martin, which is now housed in the Memorial.

Appeal for Additional Funds

All MSMS Members who have not contributed to their Beaumont Memorial Project—and those doctors who have already contributed but who stated "Call upon me if you need additional help"—are now invited and urged to send checks for completing the furnishing of the Beaumont Memorial.

Michigan Health Council Program Defines Areas of Responsibility in Health

In defining the areas of responsibility in Health, one quickly recognizes the important part played by the doctor of medicine.

Also immediately obvious to even the casual observer is the important position of the consumer of health services.

While the M.D. has a direct-line contact with the consumer of health, a vast number of ancillary health activities lie in the area proximate to both physician and consumer (Chart I).

look to the doctor of medicine for the answers to community health questions. Both the M.D. in private practice and the Public Health officer are able to provide health information and guidance which, if followed, will lead to successful fruition of any community health program. When the two are given the opportunity of joint consideration of a local health problem, the community program thrives.

Thus, seeking counsel and guidance of the local

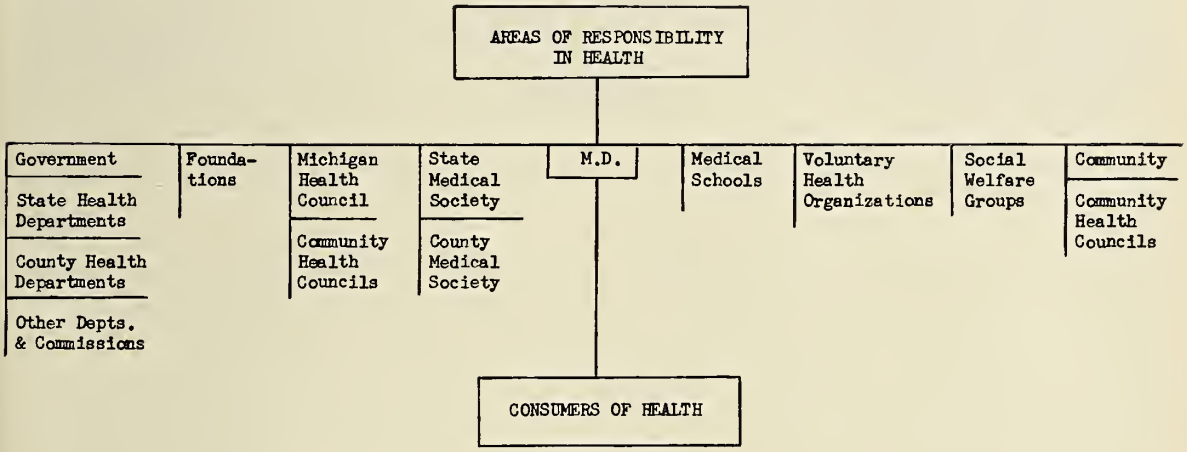


Chart 1.

In our modern pattern of living, these various health groups function to provide numerous worthy health services. They also have accepted certain responsibilities which they must fulfill.

Cutting across these health organizations (organization-wise) is the Michigan Health Council organized in 1943 by Michigan State Medical Society, Michigan Hospital Service, Michigan Medical Service and Michigan Hospital Association.

Conceived as an organization designed to work closely with the ancillary groups, Michigan Health Council has developed projects which provide service and information both to the Doctor of Medicine and the consumer of health services.

In each of these projects, Michigan Health Council urges the participating Community or organization to recognize its own responsibility. The effect of this effort can best be illustrated in two of the Council's major projects, namely, the Community Health Council Organizational program and the M.D. Placement project.

Community Responsibility Defined

In working with community groups interested in health, MHC first urges the local organization to

M.D., and the Public Health officer is the first responsibility of the community. Its second responsibility lies in accepting and following this guidance.

Conversely, it is the responsibility of the M.D. and the Health director to provide the participation and counsel when it is sought.

Michigan Has Good Record of Co-operation

Ever since the present expanded activities program was launched five years ago, this pattern of mutual participation has been accepted and followed in more than sixty communities in which MHC has worked. Its effectiveness can best be measured by the success of the forty-five Community Health councils now functioning in various parts of the state.

M.D. Placement Brings New Responsibility To Community

Communities do not always face up to their own responsibilities in their efforts to procure an M.D. Such basic factors as (1) actual need, (2) utilizing the M.D.'s services once he arrives, (3) accepting the M.D. and his family into the com-

munity, and (4) providing school, religious and social facilities, are among the basic responsibilities which a community occasionally fails to recognize.

In working with more than 125 Michigan communities which have registered with the MHC Doctor Placement service, we have urged their attention to these, as part of their area of responsibility in health.

date it has presented 118 doctors of medicine, 29 public health people, 20 representatives from the nursing profession and 95 persons representing other health interests.

According to current commercial TV survey listings, the program carries a 1.5 rating which, in the Detroit Area, represents between 30,000 and 40,000 TV sets receiving the program.



MICHIGAN HEALTH COUNCIL OFFICERS for 1954 are: *(left to right)* L. Gordon Goodrich, Detroit, treasurer; Herbert Estes, Ann Arbor, vice president; H. B. Zemmer, M.D., Lapeer, president; J. S. DeTar, M.D., Milan, medical advisor, and Hugh W. Brenneman, Lansing, secretary.

MHC Doctor Placement Project Expanded

Ever since the M.D. Placement project was turned over to MHC in 1953, the project has been steadily expanded.

During that period contact has been established with 377 M.D.s interested in general practice and thirty-seven men seeking a location to practice their specialty. During the same period, thirty-three Michigan Hospitals with training programs agreed to co-operate with the plan and the two Michigan Medical Schools have provided full co-operation.

One-hundred-thirty-seven communities have registered with the service and eighteen hospitals have sought staff personnel.

In the summer of 1953 and again in June 1954, the AMA sent representatives to Michigan to study our plan. In 1953 they studied the MHC system and controls and in June 1954 they made a conducted field trip throughout Michigan, studying the community service plans and the different types of community effort utilized in doctor placement activities. This data will be published by AMA.

To date MHC has been involved indirectly in fifty-four placements in Michigan, and directly instrumental in twenty-five placements. The MHC doctor placement activities are guided by the MSMS Committee on Rural Medical Service.

Court of Health TV Series in Third Year

June 1954 marked the start of the third consecutive year for the "Court of Health" television series. This half-hour telecast, carried weekly over WJBK-TV, Detroit, is produced by MHC. To

All production costs are borne by the Michigan Health Council. The activities are guided by a special Television committee with qualified representation from MSMS including: R. W. Teed, M.D., chairman; B. M. Harris, M.D., Lawrence A. Pratt, M.D., O. Todd Mallery, Jr., M.D., Otto K. Engelke, M.D., and Herbert Estes, vice president of Michigan Health Council.

The program has given the medical profession an opportunity to meet with laymen and representatives of other professions to discuss important health subjects and objectives in a favorable, informal atmosphere and at the same time, take the message to more than 40,000 people each week. Present plans envisage even more dramatic, factual presentations of health information and progress during the coming months.

Appraisal Project Points Up Responsibilities

At the request of MSMS and Michigan Heart Association, Michigan Health Council accepted the invitation to stimulate activities in the Periodic Health Appraisal project.

Handling the secretarial details with the guidance of a committee of Doctors of Medicine chosen by the MSMS, the first exploratory meeting was held in Jackson on October 10, 1951.

The committee accepted the responsibility of developing details of the periodic health appraisal idea through a series of meetings and discussion sessions.

On August 17, 1954, the committee decided that the responsibilities in such a program of annual or periodic physical examinations clearly divide into two areas, (1) responsibility of the M.D., and

(2) responsibility of the public. It therefore was the sense of this committee that the program should be clearly divided into two parts, one of which would be designed to acquaint the Doctor of Medicine with the program and the second to inform the public on how it could participate.

To pursue their first responsibility, the committee defined and set into motion a comprehensive educational program directed toward the re-emphasizing of this important concept to the M.D.

Rural Health Conference Delineates Areas

The eighth annual Michigan Rural Health conference, scheduled for East Lansing on January 20-21-22, 1955, will pursue a pattern established several years ago which clarifies and defines Areas of Responsibility in Health.

In a dramatic courtroom atmosphere, "The Court of Public Appraisal" met at the fifth annual conference and heard "testimony" from representatives of (1) Medical School faculty and students, (2) Doctors of Medicine (3) organized voluntary health organizations, (4) government, and (5 consumers of health. Each was asked to defend the aims, objectives and effectiveness of current programs in his respective orbit.

The central theme of last year's conference pointed out the responsibility of: (1) community, (2) industry, (3) public health, and (4) medical profession, in the fast growing, fringe area, residential sections.

The conference this year will again explore these areas of responsibility and bring in additional ancillary and related groups to study, discuss and plan for greater understanding and co-operation.

Responsibility Unlimited

Part of America's economic strength lies in the willingness of its citizens to accept responsibility.

Business, industry and the professions have developed effective programs based on a mutual understanding of needs and services.

Michigan men of medicine readily recognize their responsibilites, and are meeting them in many different ways. As they serve on committees, attend innumerable meetings, conferences and planning sessions, they are providing counsel and guidance which can come from no other source; the MHC is one medium for making their work and advice more available to the public.

Through its various projects, its publications, its Community Health councils and its other activities, Michigan Health Council will continue to call to the attention of the people of our state, the many worthy things being done by members of the medical profession.

MHC PROJECTS HELP DEFINE AREAS OF RESPONSIBILITY IN HEALTH

Membership Enrollment Campaign	Michigan Health Council Bulletin
Annual Michigan Rural Health Conference	Film Information Service
Community Health Council News	Michigan Health Council Film
Community Health Council Organizational Activities	Annual Awards
Michigan Health Council Television Show	Periodic Health Appraisal
Community Health Council Service Bureau	M.D. Placement Service
Clearing House on Health Questions	Miscellaneous Services
Michigan Health Council Directory	Medical Associates Procurement

I WILL LIFT UP MINE EYES

(Continued from Page 1139)

ball landed in a bunker. As a rule, Howard keeps his eye on the ball—he plays hard at work and works hard at play—but the hills are as important to him now, even on a golf course, as they were in High School and Preparatory College where he was known as "the boy from the hills."

At a recent banquet given in honor of Dr. Lawrence Reynolds, another eminent Michigan radiologist, Dr. Doub was the official representative of the American College of Radiology, and Dr. Cyrus C. Sturgis, Professor of Medicine at University of Michigan and a classmate of Dr. Doub in the 1917 class at Johns Hopkins, was the toastmaster. After Dr. Doub's glowing tribute to Dr. Reynolds, Dr. Sturgis remarked "If Howard had done as well at Johns Hopkins as he did in paying tribute to Larry, he would have been first in his class rather than second." Dr. Sturgis in his levity sounded a harmonious chord in the pattern of Howard's life. His sterling, simple virtues of industry, patience and love of truth were destined to make him a leader in his chosen field of radiology.

—Clyde K. Hasley, M.D.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

ADDITIONAL TB PROJECTS APPROVED

Two additional local projects have been approved in the expanded tuberculosis control program. Both have to do with ways of handling the problem of tuberculosis in the state's migrant labor force. The projects are in Bay County and in Saginaw County. In each county a nurse is employed for special work among migrant laborers.

THIRD MULTIPLE SCREENING STUDY

Michigan's third industry-based pilot study in health screening for adults was carried on in Alpena in late August and early September, in the Besser Manufacturing Company and the Huron Cement Company. Working together in the study were management and labor in the plants involved and members of the local medical society, with District Health Department Number Four giving local direction and the Michigan Department of Health assisting.

As in the preceding studies in Munising and Otsego, participation of the employes was entirely voluntary and the screening was done on company time.

Procedures included in the screening were checking of height and weight, blood pressure, hemoglobin, blood specimens for syphilis and diabetes, chest x-ray for tuberculosis, heart abnormalities and cancer of the lungs, and urine specimens for albumin, sugar and urinary sediment tests.

Reports were furnished to the physician named by the person examined and to the health department for assistance in follow-up.

The person with significant findings was notified that the results of his tests had been reported to his physician and was urged to get in touch with his physician promptly. The local health department will follow through on these persons to make sure, if possible that they see their physicians and return to them for any needed treatment.

The person with negative findings was notified that his screening indicated no abnormal conditions but that the screening was in no sense a thorough examination and gave no final proof that everything was as it should be.

The pilot studies are being undertaken to add to the relatively meager information on the value of screening as a device for finding incipient chronic disease in apparently-well adults and on the effectiveness of this approach in motivating persons to secure needed medical examination and treatment. The studies will help to define the degree and scope of the chronic disease problem in the population groups screened. They will help to determine what screening levels are practical. They will also furnish data on the costs of a screening program, to indicate whether results justify the expenditure.

It is hoped that the studies will serve to work out a mutually satisfactory pattern of community co-operation between health departments, practicing physicians and interested agencies and groups in the community in promotion of health of adults, with the health departments serving as expediting agents in finding persons in need of medical examination and care and getting those persons into the office of their family physician.

* * *

INFECTIOUS HEPATITIS HIGH

Infectious hepatitis is unusually prevalent in Michigan this year. The number of cases reported up to September first is higher than for the entire year of 1953. Physicians are reminded that the disease is reportable, and are urged to report promptly.

An adequate amount of gamma globulin is available for the prophylactic injection of household contacts of cases of infectious hepatitis.

NEW VISION PAMPHLET AVAILABLE

A leaflet that physicians may find useful is "Questions Parents Ask About Glasses," just issued by the department. It answers briefly and simply some of the questions that constantly occur in the work of the vision unit. This is somewhat of a companion leaflet to "If Your Child Has a Hearing Loss" which answers some of the common questions that parents ask about hearing.

Both pamphlets are available from local health departments or from the State Health Department without charge.

The growth of disseminated breast cancer in bone results in breakdown of bone tissue and a loss of the calcium of which it is composed. The patient then excretes more calcium than is taken in through the diet.

* * *

It has been established that viruses can be trained to destroy cancer in experimental animals.

* * *

By the use of normal and cancer cells growing side by side and at the same rate, certain compounds related to building blocks of nucleic acids have now been found to be one thousand times as injurious to cancer as to analagous normal cells.

* * *

Sustained growth of human cancer in tissue culture has now been achieved.

* * *

Regular and rapid growth of human cancer in laboratory animals is now possible.

* * *

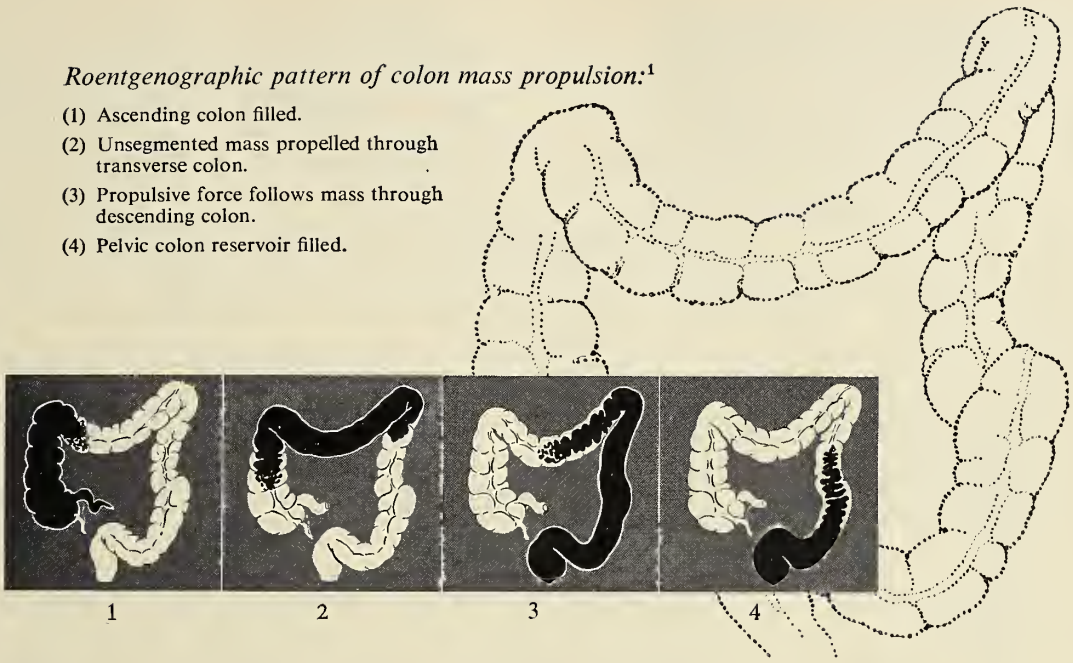
It has been revealed that human melanoma tissue, the most malignant cancer type, is dependent on the pituitary hormone, intermedin, for its growth.

* * *

Only by means of a simple blood test, a reaction for cancer given by the blood of presumably well individuals, will the detection of early cancer on a large scale be possible. Unfortunately, such a test is not yet known.

Roentgenographic pattern of colon mass propulsion:[1]

(1) Ascending colon filled.
(2) Unsegmented mass propelled through transverse colon.
(3) Propulsive force follows mass through descending colon.
(4) Pelvic colon reservoir filled.



Reestablishing Bowel Reflexes with Metamucil®

Nervous fatigue, tension, injudicious diet, failure to establish regularity, too little exercise, excessive use of cathartics—all factors which contribute to constipation.[2]

Sufficient bulk and sufficient fluid form the basic rationale of treatment of constipation with Metamucil.

Metamucil (the mucilloid of Plantago ovata) produces a bland, smooth bulk when mixed with the intestinal contents. This bulk, through its mass alone, stimulates the peristaltic reflex and thus initiates the desire to evacuate, even in patients in whom postoperative hesitancy exists.

Factors Contributing to Chronic Constipation

Such gentle stimulation is of distinct advantage in reeducating and reestablishing those reflexes which control bowel evacuation. Many factors may pervert the normal reflexes, causing finally chronic constipation. Among them are: nervous fatigue and tension, improper intake of fluid, improper dietary habits, failure to respond to the call to stool, lack of physical exercise and abuse of the intestinal tract through excessive use of laxatives.[2]

Correction of constipation logically, therefore, lies in the suitable adjustment of these factors. The characteristics of Metamucil permit the correction of most of these factors: it provides bulk; it demands adequate intake of fluids (one glass with Metamucil powder, one glass after each dose); it increases the physiologic demand to evacuate; and it does not establish a laxative "habit." Metamucil, in addition, is inert, and also nonirritating and nonallergenic.

Dosage Considerations

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of 4, 8 and 16 ounces. Metamucil is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice: A Text in Applied Physiology, ed. 5, Baltimore, The Williams & Wilkins Company, 1950, pp. 579-583.

2. Bargen, J. A.: A Method of Improving Function of the Bowel, Gastroenterology *13*:275 (Oct.) 1949.

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In Memoriam

ARTHUR O. BOULTON, M.D., of Gladwin, who retired from practice several years ago after serving that community for forty-four years, died May 13, 1954, at the age of seventy-nine.

A native of Moorestown, Ontario, Dr. Boulton was a graduate of the former Detroit College of Medicine. He practiced briefly at Sault Ste. Marie and in Lapeer County before moving to Gladwin.

Dr. Boulton was an Emeritus member of the Michigan State Medical Society.

Surviving are his wife, Rose; a son, Lieut. Commander Thomas Boulton, a professor at the United States Naval Academy, Annapolis, Maryland; a sister, and three grandchildren.

HENRY F. CROSSEN, M.D., died June 20, 1954, at the age of sixty, following a brief illness. He had been a resident of Detroit for the last thirty-five years.

Dr. Crossen was on the medical staff of the Detroit House of Correction and St. Joseph Hospital. He was a member of the American College of Surgeons and the American Academy of Ophthalmology and Otolaryngology.

He was a native of Minnesota and a graduate of Indiana University, 1919.

Surviving are his widow, Mary E., and three sons.

JAMES C. DROSTE M.D., of Grand Rapids, died May 7, 1954, in Toronto, Ontario, where he had been a hospital patient for several months. He was sixty-seven years old.

Dr. Droste was co-founder and secretary-treasurer of Ferguson-Droste-Ferguson Hospital, where he served as staff surgeon and chief of staff. The hospital was established in 1928. From 1944 to 1946 Dr. Droste was secretary-treasurer of the executive staff of St. Mary's Hospital, Grand Rapids, and served as consultant on proctology.

A native of Grand Rapids, Dr. Droste attended St. Jerome College at Kitchener, Ontario, and the University of Michigan. He received his medical degree from the University of Illinois in 1913 and served his internship at St. Mary's Hospital in his native city.

Dr. Droste was a member of the National Gastroenterological Society. Survivors include his wife, Ada Katharine, two sons, two brothers, three sisters, and two grandchildren.

WILLIAM A. HAGEN, M.D., who practiced medicine in Muskegon County for fifty-two years, died June 21, 1954. He was seventy-seven years of age.

A native of Trenton, New Jersey, Dr. Hagen moved with his family to Muskegon County as a child and attended school there. He received his medical training at Baltimore Medical College and Grand Rapids Medical

(Continued on Page 1152)



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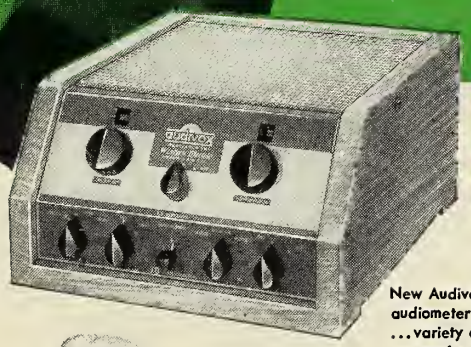
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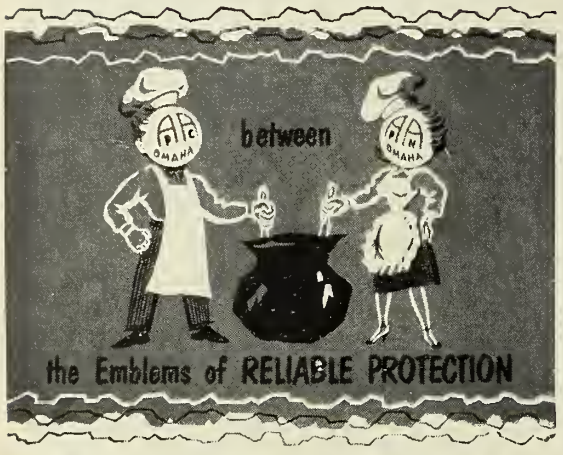
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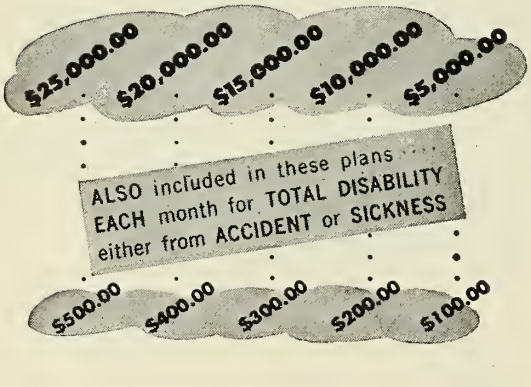
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WILLIAM A. HAGEN

(Continued from Page 1150)

College, setting up practice in Muskegon in 1902. From 1905 to 1923 he practiced in the community of Ravenna. He then returned to Muskegon.

Dr. Hagen is survived by his wife, Jenny; a son, William A. Hagen, Jr., currently an electrical engineer in Frankfort, Germany; two daughters, Mrs. G. S. Smith of Milwaukee and Miss Florence Hagen of Grand Rapids; a sister and two grandchildren.

ALBERT H. KROHN, M.D., of Detroit, died June 2, 1954, at the age of sixty-one years.

A native Detroiter and regimental surgeon of the 116th Infantry in World War I, Dr. Krohn was graduated in 1917 from the Detroit College of Medicine, now Wayne University College of Medicine.

Dr. Krohn is survived by his widow, Sara; two sons, Bernard Krohn, M.D., of Bellflower, California, and Captain Lawrence Krohn of Fort Knox, Ky.; a brother and three grandchildren.



ARTHUR BUTLER McGRAW, M.D., a surgeon at Henry Ford Hospital, Detroit, since 1922 and surgeon in charge of the tumor clinic there since 1932, died June 18, 1954, at the age of sixty years.

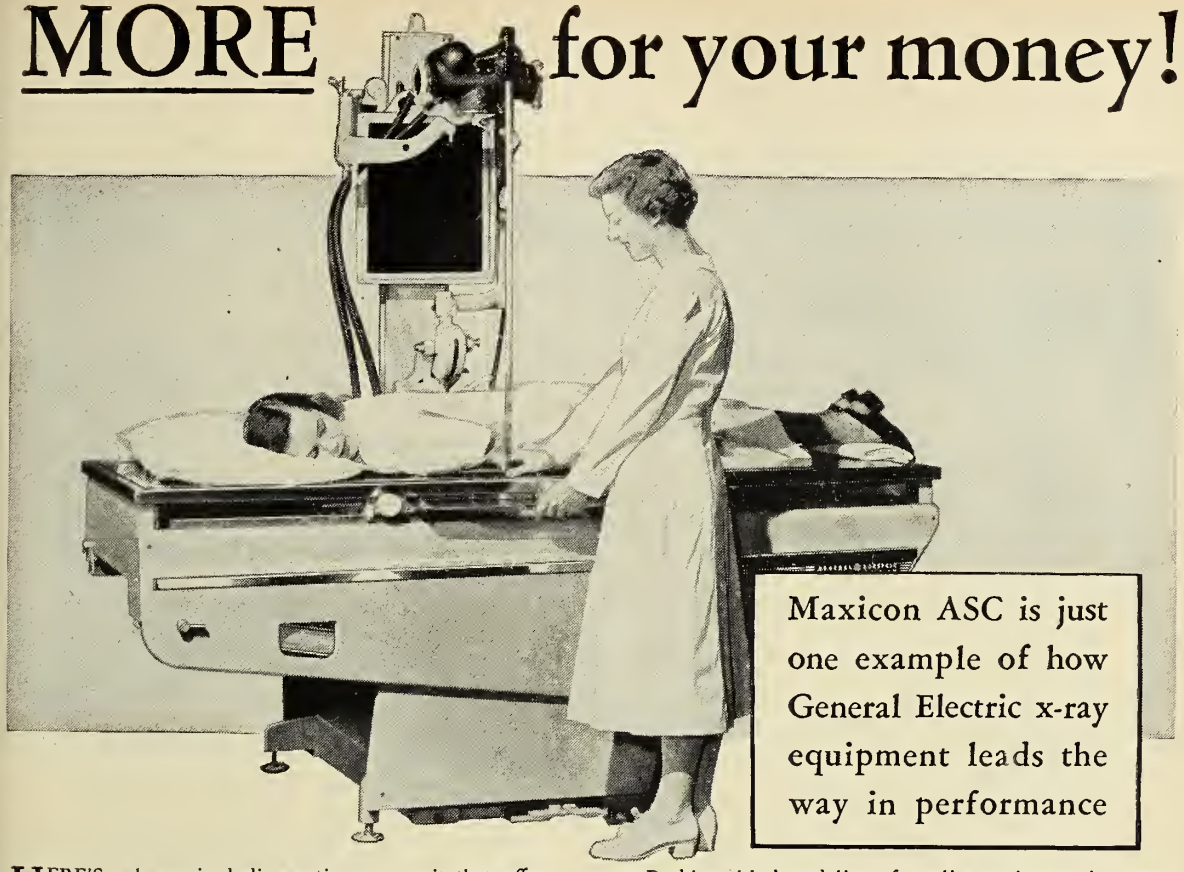
Dr. McGraw was considered to be one of the country's foremost students of cancer. He joined the staff of Henry Ford Hospital as a junior surgeon, becoming an associate surgeon in 1927, when he was appointed surgeon in charge of the division of general surgery. He first served as assistant and later as associate of the late Roy B. McClure, M.D., developing an interest in thyroid and breast surgery which he maintained throughout his life.

Dr. McGraw was a member of numerous professional societies. He was a Fellow of the American College of Surgeons, the New York Academy of Medicine, and the Detroit Academy of Surgery, and was a founder member of the American Board of Surgery. During World War I, Dr. McGraw was a private in the Army Medical Corps, attending medical school. In World War II, he served with the United States Navy from 1942 to 1946, rising to the rank of captain. In recognition of his cancer follow-up system devised for the Henry Ford Hospital Tumor Clinic, Dr. McGraw was appointed in 1950 to the position of Associate Professor of Surgery (oncology) at Wayne University College of Medicine.

Dr. McGraw was graduated from Yale in 1915, and received his M.D. degree from the College of Physicians and Surgeons, Columbia University, in 1919. He served two years' internship at St. Luke's Hospital in New York. A native of Detroit, Dr. McGraw came from a well-known family. His great-uncle, Theodore A. McGraw,

(Continued on Page 1154)

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Radiation-protective table panels	YES	NO	NO	NO
18-in. focal-spot to table-top distance for fluoroscopy	YES	NO	NO	YES
Counterbalanced tube stand, providing adjustable focal-film distances up to 40 in.	YES	NO	NO	NO
Signal-light centering system for Bucky radiography	YES	NO	NO	NO
Provision for cross-table radiography	YES	NO	NO	NO
12-step line-voltage compensator	YES	NO	NO	NO
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ARTHUR BUTLER McGRAW

(Continued from Page 1152)

M.D., was one of the founders and for many years dean of what is now Wayne University College of Medicine.

Dr. McGraw is survived by his wife, Leola; two daughters, Grace I. McGraw and Mrs. Sarah M. Cinelli; and two sons, both physicians, Thomas A., a graduate of Cornell Medical School in 1951, and Robert S., a graduate of Johns Hopkins Medical School in 1954.

ESLI T. MORDEN, M.D., died June 1, 1954, ending more than fifty years of service to the community of Adrian. Born in Adrian seventy-six years ago, Dr. Morden spent his entire professional life in that city.

The son of a doctor of medicine, Dr. Morden attended public school in Adrian, graduating from the Michigan College of Medicine and Surgery, Detroit, in 1901, and from Chicago Eye, Ear, Nose and Throat College in 1902. For the first six years of his professional life, he practiced with his father.

Dr. Morden was past president of the Lenawee County Medical Society, the Adrian Club, Rotary Club and other civic organizations. He had been active in Red Cross, the Chamber of Commerce, and the YMCA. During World War I, Dr. Morden served as a member of the Army Medical Corps, being discharged with the rank of captain.

Dr. Morden is survived by his widow, Florence.

WALDRON W. WELLMAN M.D., of Holly, died suddenly May 23, 1954, at the age of forty-nine years. He had practiced in that community for nine years.

Born in Richmond, Michigan, Dr. Wellman was graduated from Mt. Clemens High School and attended Highland Park Junior College, before entering the University of Michigan. He received his M.D degree at the University in 1930.

Before moving to Holly, Dr. Wellman practiced in Grosse Pointe, following his internship at St. Joseph's Mercy Hospital, Detroit.

Dr. Wellman is survived by his wife, Kathleen; a daughter, Janet; two brothers and a sister.

FRANK C. WITTER, M.D., Chief of the Surgical Department at Highland Park General Hospital for more than thirty years, died May 8, 1954, following a brief illness. He was seventy-five years of age.

Dr. Witter was born in Lawrence, Michigan, and attended University of Michigan Medical School. Following his graduation in 1906, he remained at the University on the staff of Reuben Peterson, M.D., Professor of Obstetrics and Gynecology. Moving to Petoskey in 1909, Dr. Witter practiced there until 1918, when he moved to Detroit.

When Highland Park General Hospital was built in 1921, Dr. Witter was selected as Chief of the Surgical Department. He remained there in that capacity until 1952, when he retired as chief but continued private practice with his son, Joseph A. Witter, M.D. Upon the occasion of Dr. Witter's 25th anniversary with High-

(Continued on Page 1170)

VAGINAL ANATOMY AND CONCEPTION CONTROL

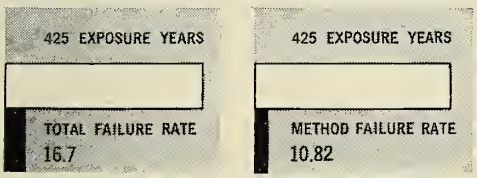
Another observation based on 425 patient years of exposure

According to a recent comparative study by Guttmacher and co-workers,[1] vaginal anatomy and parity apparently play important roles in the selection of a contraceptive method. Using the jelly-alone method, they found that markedly greater protection was afforded to women of low parity, and suggested that the jelly "might be confined to the region of the external os more successfully in the less relaxed vagina."

Of 325 women who used the jelly-alone [RAMSES® VAGINAL JELLY] technic for periods ranging from three months to three years, 36 percent were primiparous. The statistically valid data, based on 425 patient years of exposure, definitely indicate that the jelly-alone method of contraception was considerably more effective "among patients of lower parity."

The use of jelly alone as a contraceptive measure proved highly successful in the entire group, and only a few unplanned pregnancies occurred. These were either considered as (1) patient failures, comprising those instances in which the patient admitted complete omission or irregular use of the jelly, or as (2) method failures, where the patient claimed regular and careful use of the jelly.

The total unplanned pregnancy rate averaged only 16.7 per 100 patient years of exposure. If method failures alone are calculated, the unplanned pregnancy rate was reduced to 10.82 per 100 patient years of exposure.



Effectiveness of RAMSES VAGINAL JELLY as contraceptive measure in 325 patients during 425 patient exposure years[1]

It is apparent from this study that RAMSES VAGINAL JELLY is markedly effective in the jelly-alone technic, and that it is a "method of choice" for most nulliparous and primiparous patients.

Anatomic considerations, however, should not be the sole criteria used in the selection of a contraceptive method. Such factors as patient intelligence and cooperation, as well as the sincere desire for conception control, are also of paramount importance. Thus, the choice of method must, in the end, depend upon the physician's evaluation of the individual patient.

When in the judgment of the physician, parity, anatomic factors, or motivation indicates the use of the diaphragm-and-jelly method of contraception, the RAMSES® TUK-A-WAY® Kit is recommended. The RAMSES® diaphragm is flexible and cushioned — providing an optimum barrier with utmost comfort. In combination with RAMSES jelly, it offers an unsurpassed contraceptive technic — and both products are **accepted by the appropriate Councils** of the American Medical Association.

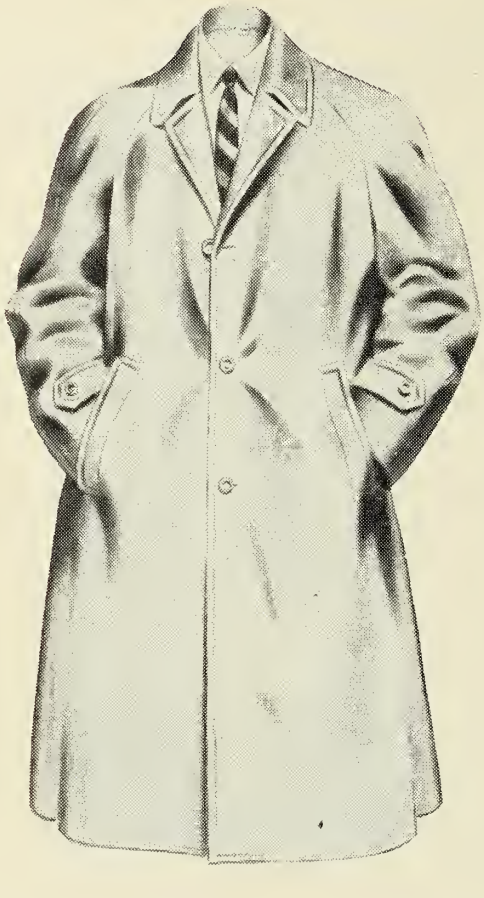
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1. Finkelstein, R.; Guttmacher, A., and Goldberg, R.: Am. J. Obst. & Gynec. 63:664, Mar., 1952.

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Communications

To the Editor:

Resolution

WHEREAS, The actions of the National Board of Medical Examiners of the United States have been and are incompatible and in violation of Act No. 237, P. A. of 1899, and Acts amendatory thereto, the Medical Practice Laws of Michigan,

BE IT RESOLVED, That on and after November 1, 1954, the Michigan State Board of Registration in Medicine will not accept or endorse the Certificate of Examination of the National Board of Medical Examiners of the United States as a basis for registration and licensure to practice medicine in Michigan.

MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE
J. EARL MCINTYRE, M.D.
Executive Secretary

Lansing, Michigan
September 1, 1954

* * *

Dr. Wilfrid Haughey, Editor
Journal of the Michigan State Medical Society
610 Post Building
Battle Creek, Michigan

Dear Sir:

A few months ago, your editorial entitled "Another First?" on page 994 of Volume 52 of the Michigan State Medical Society JOURNAL was brought to our attention, and we were finally able to obtain a copy of this a few days ago.

We feel that your pride in the development of a method of analyzing hospital experience by punched-card methods is very justifiable, but we wish to question priority of this method which is suggested in your editorial. We assume that you are referring to the procedure conducted by the Southern Michigan Hospital Council under the grant from the Kellogg Foundation.

At Barnes Hospital in St. Louis, we have had a punched-card system of analysis of medical record diagnosis and statistics for many years. In 1952, we began using the diagnostic punched cards to prepare a diagnostic file similar to, but somewhat more extensive than, that subsequently developed by the Southern Michigan Hospital Council. For several years previously, we had accumulated patient statistics information by punched card methods. In 1953, we revised this method and now have our entire admission analysis and discharge analysis on punched cards. In both of these analyses, the number of patients is counted with distribution both by physicians and services. In the discharge analysis, further distribution is done by condition of the patient on discharge, average days stay on various services, number of consultations and several other factors relevant to medical analysis, such as analysis of tissues removed at operation, wound infections, both clean and otherwise, and other complications.

We know of no other installation in the country which has developed this procedure to the extent which we have here, and for this reason prepared our article which was published in *Modern Hospital* in April, May and June of this year. If there has been any publication of a comparable system, we are not aware of it. We would appreciate any information which you can give us as we have been asked to present a discussion on this subject before

(Continued on Page 1158)

Say you saw it in the Journal of the Michigan State Medical Society

NOT ARTHRITIS BUT ARTHRALGIA...

If the patient complaining of aching joints is a woman between 37 and 54 years of age, it is highly possible that she is suffering from arthralgia rather than arthritis.[1] It has been estimated that arthralgia occurs in about 40 per cent of women with estrogen deficiency, and is exceeded in frequency only by symptoms of emotional or vasomotor origin.[2] In fact, arthralgia may be as indicative of declining ovarian function as the classic menopausal hot flushes.

Arthralgia, however, is just one of a vast number of distressing but ill-defined symptoms that may be precipitated by the loss of estrogen as a "metabolic regulator." Other good examples are insomnia, headache, easy fatigability, and tachypnea.

Because these symptoms sometimes occur years before or even long after cessation of menstruation, they are not always readily associated with estrogen deficiency, and the tendency may be to treat them with medications other than estrogen. Obviously, sedatives and other palliatives cannot be expected to produce a satisfactory response if an estrogen deficiency exists. Only estrogen replacement therapy will correct the basic cause of the disorder.

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1. Greenblatt, R. B., and Kupperman, H. S.: M. Clin. North America *30*:576 (May) 1946. 2. McGavack, T. H., in Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 225.

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(Continued from Page 1156)

the annual meeting of the Medical Record Librarians at their coming National Convention in Detroit.

Please do not feel that we are minimizing the work of the Southern Michigan Hospital Council. We feel that their independent application of punched card procedures confirms our impression of the value of the system in both medical studies and hospital administration experience.

Sincerely,
C. O. Vermillion, M.D.
Associate Director

St. Louis, Missouri
August 26, 1954

* * *

Dear Doctor Haughey:

Thanks for sending me the correspondence with Doctor Vermillion. I have re-read your editorial and the paper by Bradley, Vermillion and Anderson. I don't see much to be gained by controversy over priorities in this matter.

We make no claim to being first to apply machine methods in medical record room indexing and medical service analysis. As is stated in Part I of Doctor Vermillion's article (April, 1954, *The Modern Hospital*) ". . . many institutions in the country had already applied these methods to medical records." The practice is so well established that we have not attempted to review its history. For example, the University of Michigan and the Mayo Clinic have both abstracted a great deal of medical information on patients onto punched cards since the early 1930's. These have been used as medical room indexes of an extremely useful sort and to provide statistical analyses of the services rendered by the institutions. Apparently, the Barnes Hospital first had machine-produced indexes in about 1947.

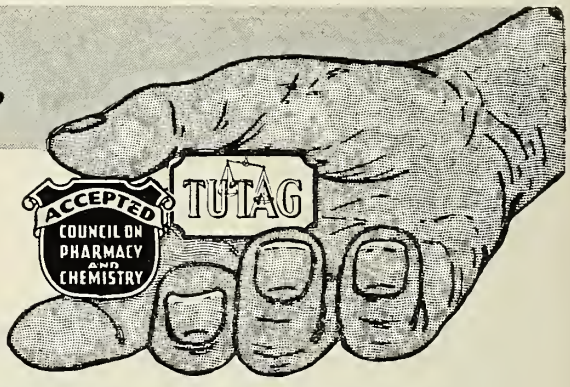
The use of a listing as an index, as described by the Barnes group, preceded ours by several years, although our development of this type of index was independent of theirs. So far as I know, Doctor Vermillion has not seen our index—it has not been published—so I am not quite sure how he can claim his is more extensive than ours. Our index ("diagnostic file" as he calls it) is assembled every six months. We index up to eight diagnoses and seven operations on each discharged patient, and by machine methods print our index in such a way that one need only refer to one place in the medical record room index to find all cases of the particular diagnosis, whether it was a primary or secondary diagnosis, rather than in four places as is the case at the Barnes Hospital. From our index can also be read directly the discharge date, length of stay, age, sex, race, condition of the patient on discharge, whether or not an autopsy was performed, the attending physician, the operating surgeon, the anesthetist, the type of anesthesia, the pathologist's decision as to the presence or absence of disease in the tissue submitted, the type and number of x-ray and laboratory examinations, the number of blood transfusions, data on transfusion reactions, type of radiation therapy if employed, the admission hemoglobin value in grams, the numbers of consultations and complications, who paid the bill, and a coded record of the data pertaining to special studies which may be in progress. This appears to be considerably more extensive than the index illustrated in *The Modern Hospital*.

So much for the application of punched cards to medical record room indexes and routine statistical analyses.

The Southwestern Michigan undertaking is unusual in that there are fifteen hospitals voluntarily pooling statistical data on their professional activities in a combined effort of medical staffs and hospitals to measure the

(Continued on Page 1160)

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(Continued from Page 1158)

effectiveness of the medical care supplied. The study is designed to compare the medical practice of each hospital and its physicians with that of other hospitals and other physicians. Our primary aim has been the perfection of a medical tool. The administrative values to the hospital of mechanization have proved very important, but are still, in our minds, secondary.

The development at Barnes Hospital has been for internal use, as have been those others with which we are familiar, except that in the Rochester, New York, Hospital Council. In the March 15, 1934, issue of the *Journal-Lancet* (Vol. 54, pages 148-156) Halbert L. Dunn, M.D., now Chief of the National Office of Vital Statistics proposed the establishment of a ". . . . Minnesota Hospital Statistical Bureau" which could, using punch card methods, provide a clearing house for medical and administrative data for the hospitals of Minnesota. I do not believe this was ever actually established.

Our study started in 1950 as a copy of the Rochester study. The introduction of machine methods in 1952, with the patient rather than the hospital as the basic unit, made possible a tremendous variety of comparisons with a great deal more value. Already some of the studies have produced truly useful information for our staffs, in spite of the fact that refinements in method have demanded a great deal of attention. Now the methods are well enough worked out that much more attention can be devoted to studying the data.

In 1953 our fourteen hospitals in Southwestern Michigan were, in effect, a 1000 (adult) bed general hospital with 42,000 adult and 8,000 newborn discharges in which to study medicine and make comparisons between the care of patients in various hospitals and under various physicians. This year, with fifteen hospitals, we will

(Continued on Page 1162)

Say you saw it in the Journal of the Michigan State Medical Society

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(Continued from Page 1160)

have about 1,300 adult beds with 65,000 adult and 12,000 newborn discharges. The physician in the smallest hospital is no longer isolated and can profit by the experience of all. For example, the 1953 primary appendectomy series, which is now under intensive study, numbers about 1400 cases—a sizable number.

The possibilities have so impressed the medical staffs that we believe "another Michigan first" has occurred and is being reported among the news items of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. I refer to the establishment of an association of the Chiefs of Staff of the participating hospitals. Periodic meetings are scheduled, and plans are under way to utilize the statistical data on the various hospitals in setting up programs for meetings of the consolidated staffs of the fifteen hospitals.

This group of hospitals is also carrying out a pilot run of a promising, simple method of doing a medical audit. This is being developed by the American College of Surgeons and the Professional Activity Study in an effort to find a method by which it will be feasible for a medical staff to conduct its own medical audit. Community Health Center of Branch County, Coldwater, Michigan, and Pennock Hospital, Hastings, Michigan, are already at work with several other hospitals scheduled to start at an early date.

The Southwestern Michigan activity, which is aimed toward the study of medical care so that our staffs can tell how they are doing and, as a result, practice better medicine, does not seem to us to be in any sense a project competitive with that described by the Barnes group, and we are sure that many of their methods can be used to improve our project.

Sincerely,

VERGIL N. SLEE, M.D., *Director*

Hastings, Michigan
August 31, 1954

L. W. Hull, M.D., President
Michigan State Medical Society
Lansing 15, Michigan

Dear Dr. Hull:

Thanks for all the kind expressions related in your letter of August 9, concerning our contributions to the fine work the medical profession of Michigan did in establishing the Beaumont Memorial.

It was a real pleasure for Parke, Davis & Company to support this worthwhile movement which resulted in a memorial to a great doctor.

Please extend our sincere thanks to the Michigan State Medical Society for affording us this privilege.

Sincerely,

H. J. LOYND
President
Parke, Davis & Co.

Detroit, Michigan
August 18, 1954

* * *

Gentlemen:

Recently we received a reprint entitled "Preventive Geriatrics" through the regional office of the United States Public Health Service which was prepared under the supervision of the Geriatrics Committee of your Society.

We found this to be most interesting and an excellent compilation of current information in this field and felt that our own State Medical Association Committee members would gain by having a copy of the reprint. Could you supply us with twelve copies for such distribution? Any consideration will be greatly appreciated.

Sincerely yours,

WENDELL C. ANDERSON, M.D., *Director,*
Division of Chronic Diseases
and Gerontology
Indiana State Board of Health



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MICHIGAN AUTHORS

Frank H. Top, M.D., Iowa City, Iowa, formerly of Detroit, is the author of an article entitled "Factors in the Causation of Recognizable Poliomyelitis," published in the *Journal of the Iowa State Medical Society,* August, 1954.

William B. Bass, Ph.D., L. A. Schroeder, and **M. J. Vander Brook, Ph.D.,** Kalamazoo, Department of Pharmacology, The Upjohn Company, are the authors of an article entitled "Bis-(B-(o-methoxyphenyl) isopropyl)-amine, Pharmacologic Studies of a New Local Anesthetic", published in *Current Researches in Anesthesia and Analgesia,* July-August, 1954.

David H. P. Streeten, M.B., Ph.D., M.R.C.P., Ann Arbor, is the author of an article entitled "Control of the Balance and Distribution of Body Water" published in the *University of Michigan Medical Bulletin,* July, 1954.

Leland T. Henry, Class of 1956, School of Medicine, Ann Arbor, is the author of an article entitled "The Development of Blood Transfusion," published in the *University of Michigan Medical Bulletin,* July, 1954.

Carey P. McCord, M.D., Ann Arbor, is the author of "Lead and Lead Poisoning in Early America," from The Institute of Industrial Health, University of Michigan Medical Center, Ann Arbor, Michigan.

A. D. Moore, Ann Arbor, Professor of Electrical Engineering, University of Michigan, is the author of an article entitled "Future of the Sanitary Landfill" read before the Second National Conference on Trichinosis, Chicago, March 1, 1954, and published in the *Journal of the American Medical Association,* August 14, 1954.

E. H. Watson, M.D. J. L. Wilson, M.D., and **Arthur Tuuri, M.D.,** Ann Arbor, are authors of an article "Diaper Care in Nursuries" which appeared under *Clinical Notes* in JAMA of August 28.

* * *

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* * *

Arthur K. Hamp, M.D., Grand Rapids, representing the Michigan Cancer Co-ordinating Committee, addressed the Northern Michigan Medical Society in Petoskey September 9 on "Diagnosis and Treatment of Leukemias and Lymphomas."

* * *

Richard A. Rasmussen, M.D., Grand Rapids, representing the Michigan Cancer Co-ordinating Committee, addressed the Ionia-Montcalm Medical Society at Belding on August 24. His subject was "Diagnosis and Treatment of Intermediate Pulmonary Lesions."

* * *

A conference on rheumatic diseases, sponsored by the Cleveland Chapter of the Arthritis and Rheumatism Foundation and the Regional Members of the American Rheumatism Association, will be held at the Carter Hotel, Cleveland, November 10, 9:00 a.m. to 5:00 p.m., followed by a banquet. Registration fee $10.00. For program and additional information, write William S. Clark, M.D., Chairman, 2073 Abington Road, Cleveland 6, Ohio.

* * *

The American College of Surgeons will hold its 40th Clinical Session in Atlantic City, New Jersey, November 15-19. For program and information write the College at 40 E. Erie Street, Chicago 10, Illinois.

* * *

The American Urological Association offers an annual reward of $1,000 (in three prizes) for essays on the result of some clinical or laboratory research in urology. Competition is limited to urologists who have been graduated not more than ten years and to men in training to become urologists. For full particulars, write William P. Didusch, Executive Secretary, 1112 North Charles Street, Baltimore 1, Maryland.

* * *

A new cap has been developed and made available, as of October 1, 1955, to members of the Michigan Practical Nurses Association. The cap has been design-copy-writed by the Association.

* * *

"The Advantages of Private Medical Care" is the subject of the national essay contest of the Association of American Physicians and Surgeons, Inc. The contest is for high school students, with six prizes, the first of $1,000 and the second, $500.

* * *

LeMoyne Snyder, M.D., Lansing, author of "Homicide Investigation" and former medical legal director of the Michigan State Police, was profiled in the September issue of *Argosy* magazine in "Dead Men Do Tell Tales," a feature written by Harry Steeger, publisher of the magazine.

* * *

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(Continued on Page 1166)

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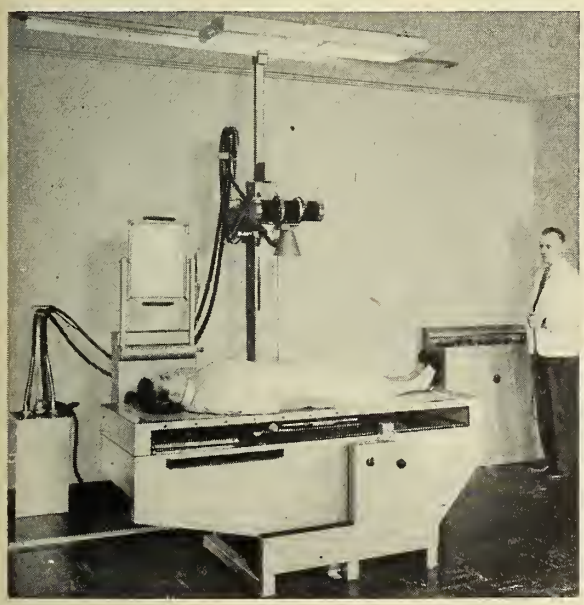
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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

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LOgan 1-1400

(Continued from Page 1164)

imately $60,000,000 a year for research according to John A. MacCartney of Parke, Davis & Company of Detroit, who is first vice president of the American Pharmaceutical Association.

* * *

The New York Academy of Medicine's twenty-seventh graduate fortnight will be held October 18-29, 1954, on "Infections and Their Management." For program and information, write the Academy at 2 East 103rd Street, New York City.

* * *

Age 65: The number of men and women in the United States now reaching the age of 65 has increased to well over 1,000,000 a year, compared to three-quarters of a million a generation ago, according to the Institute of Life Insurance. Many of those reaching age 65 in 1954 will or must retire from their jobs. Many observers question the custom of making 65 a compulsory age for retirement; they argue that each person should be kept on in employment as long as he wants and as long as his health and capabilities permit.

* * *

"Nothing has happened in the last two years to slow up or reverse the federal government's trend toward providing for the welfare of individual citizens—and if the movement continues, private insurance is on the 'way out,'" according to A. L. Kirkpatrick, insurance manager of the Insurance Department of the Chamber of Commerce of United States. He outlined three "definite steps" toward "more and more" Federal responsibility and control over the lives, health and welfare of the individual citizen. They were: (a) higher and new kinds of benefits under Social Security, (b) federal health re-insurance, (c) expansion of federal aid in controls over state and local welfare activities.

—*Journal of Commerce,* May 18, 1954

* * *

"Is the Family Doctor Obsolete?", an interesting and revealing article by David Landman, appeared in *Cosmopolitan* of July. Mr. Landman credits the American Academy of General Practice and the medical schools for a favorable change in attitude toward general practitioners—made within the last five years.

* * *

"Are We Expecting Too Much, Too Soon from the New Polio Vaccine?" was an article in *Parents* magazine (July, 1954) by Ruth and Edward Brecher—an interesting article which is being read widely by patients.

* * *

The American Medical Education Foundation was notified recently that the late Arthur B. McGraw, M.D., of Detroit had bequeated $5,000 to AMEF in his will, which was probated at Detroit September 13, 1954. This was the first such legacy awarded AMEF since its inception in 1951.

* * *

William M. LeFevre, M.D., of Muskegon, has been appointed governor for the State of Michigan of the American Diabetes Association which recently established a

Board of Governors. The Governors of the American Diabetes Association have the responsibility of stimulating statewide interest in diabetes and related conditions as well as facilitating co-ordination of such activities.

* * *

Professional Activities Study.—On Tuesday, August 24, a meeting was held of the Chiefs of Staff of the hospitals participating in the Professional Activity Study of the Southwestern Michigan Hospital Council in Galesburg. Members of the group are: Allegan Health Center, Harry Schneiter, M.D.; Battle Creek Sanitarium, James R. Jeffrey, M.D.; Blodgett Memorial Hospital (Grand Rapids), Luther C. Carpenter, M.D.; Community Health Center (Coldwater), Dean T. Culver, M.D.; Community Hospital (Battle Creek), Fred J. Melges, M.D.; Hillsdale Community Health Center, A. W. Strom, M.D.; Holland City Hospital, M. H. Hamelink, M.D.; Mercy Hospital (Benton Harbor), J. Griswold Ruth, M.D. (absent); Oaklawn Hospital (Marshall), Herman Beuker, M.D. (absent); Pawating Hospital (Niles), Robert Landgraf, M.D.; Pennock Hospital (Hastings), H. S. Wedel, M.D.; Sheldon Memorial Hospital (Albion), Clifford B. Taylor, M.D. (absent); South Haven Hospital, Edwin Terwilliger, M.D.; Three Rivers Hospital, R. D. Zimont, M.D., and William Crispe Hospital (Plainwell), Lewis F. Brown, M.D.

Purpose of the meeting was to discuss some of the information compiled on the practice of medicine in the participating hospitals. By general agreement, an informal association of Chiefs of Staff of these hospitals was formed. Luther C. Carpenter, M.D., was elected chairman, and an executive committee consisting of Dean T. Culver, M.D., A. W. Strom, M.D., and R. D. Zimont, M.D., was appointed.

Purpose of the association is to devise ways and means of taking advantage of the information on medicine and on medical care made available to these hospitals by their participation in the Professional Activity Study. The group will meet at two to three month intervals and will from time to time be expanded to include the entire staff memberships of the fifteen hospitals.

* * *

A record graduation of 6,861 physicians during the past year by our nation's medical schools has boosted the ratio to an all-time high of one physician for every 730 persons in the United States. This ratio will be lowered even more in the next few years as the number of medical graduates is expected to rise due to the continued expansion of the country's medical schools.

Today's physician population has now reached approximately 220,100. The record graduation figures were released in the fifty-fourth annual report on medical education in the United States by the American Medical Association's Council on Medical Education and Hospitals.

Highlights of the report are: (a) enrollment of 28,227 is largest number of medical students in history of U. S., (b) freshman class enrollment of 7,449 also is a record; (c) more than 76 million dollars was spent during 1953-1954 for new facilities, remodeling or completion of buildings for medical instruction; (d) budgets for medi-

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cal schools during 1954-1955 total more than 143 million dollars; (e) 21,328 physicians did volunteer teaching without pay during the year; (f) ten new four-year schools are in construction or planning stages and will be in operation within the next few years.

The ten new four-year medical schools will be at the Universities of California, Mississippi, Miami, Missouri, Florida, West Virginia, Kentucky, North Dakota, and Yeshiva University of New York and Seton Hall University. In addition, three other medical schools are being considered.—AMA News Notes, September, 1954.

* * *

Army taking 100 physicians, first in 16 months: Defense Department has asked Selective Service to call up 550 physicians under the doctor draft for assignments in December. One hundred are scheduled to go to the Army, the first draft since August, 1953. Defense said the Air Force requires 200 and the Navy, 250 physicians. The Department also requested 150 dentists, all for the Air Force.

* * *

It was good news to read George Meany's announcement that the AFL had dismissed Frank Edwards, its $35,000-a-year radio news commentator. Meany, who is president of the AFL, said the cause was Edwards oversalting the news with opinion and failing to keep news and opinion separate.

It certainly is no exaggeration to say that Edwards has been the American Medical Association's worst critic. He went to great pains to malign the AMA and distort the facts in many of his weekly broadcasts.

His place, Mr. Meany said, has been taken by Harry Flannery, former radio commentator, who is on the AFL's staff in Washington where the union's broadcasts originate.—AMA Secretary's Letter.

* * *

Gov. James F. Byrnes, speaking at a meeting of the South Carolina Medical Association said "Doctors must answer the misrepresentations of their critics. And the doctors of the state cannot hold themselves aloof from the life of the community and the state. They must, like all other citizens, take an interest in city, county, and state governments. They have great power and influence, and they should exercise it for their own good and the good of the people."—AMA Secretary's Letter.

* * *

"To Your Good Health" is the title of a new health column which is being distributed through Newspaper Feature Syndicate, Inc. The column which will discuss diseases and treatment in simple, lay language, is the "brain-child" of Dr. Joseph G. Molner, health commissioner of the City of Detroit. The column, he tells us, will certainly reflect the best thinking and policies of the medical profession. Dr. Molner is one of the outstanding health commissioners in the United States and there is every reason to believe that his new writing venture will catch on. The first newspaper to carry it is the *Pittsburgh Post Gazette.*

* * *

The Wayne University College of Medicine has established a new Bulletin to be published quarterly, and two numbers have been issued. The first number dated March,

PM says:

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1950 *Bargen* reports that since 1949 approximately 100 patients have been treated with Azulfidine. "The results have been extremely satisfactory in most cases."

Personal communication (Apr. 12, 1950)

1951 Of 119 patients treated with Azulfidine prior to 1944, 90 patients (75%) were symptom-free or considerably improved when re-examined in 1949.

Svartz, N.: Acta. Med. Scandinav. 141:172, 1951.

1952 In a series of 52 patients with chronic ulcerative colitis 30, or 58%, showed significant improvement after treatment with Azulfidine.

Morrison, L. M.: Gastroenterology 21:133, 1952.

1953 *Morrison says:* "Azopyrine [Azulfidine] . . . has been effective in controlling the disease in approximately two-thirds of patients who had previously failed to respond to standard colitis therapy currently in use."

Morrison, L. M.: Rev. Gastroenterology 20:744 (Oct.) 1953.

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954, was 36 pages with an enamel paper cover showing beaker and suture with forceps in relief. There were umerous articles of interest to the school and its gradutes, including the Michigan's Young Man of the Year, George N. Petroff, M.D., of Pontiac, with a picture of is family.

Bulletin number two came in August with a date line f June. It contains 48 pages, an article by Joseph G. Molner, M.D., Health Commissioner, on "Operations Health," with a picture and a distinguished service citaion from the Alumni Association. There were reports of he dedication of the new Medical Science Building, and he 68th Annual Clinic Day.

Michigan's foremost family physician, William J. Stapleton, Jr., M.D., was featured with pictures and a eproduction of the Scroll given by the Michigan State Medical Society. There was a picture of Robert L. Novy, M.D., and mention of his many honors featured in THE JOURNAL of the Michigan State Medical Society, his Board of Health, service, et cetera.

One page has pictures of four persons who received nonorary membership in the Alumni Association of the Wayne University College of Medicine: Harry L. Loynd, M.D., president, Parke, Davis & Company; Dr. Gordon H. Scott, dean; William Burns, LL.B., executive director f the Michigan State Medical Society; and L. Fernald Foster, M.D., medical secretary of the Michigan State Medical Society. A page each was devoted to the citaions for distinguished service to Wilfrid Haughey, M.D., nd Osborne A. Brines, M.D.

Nine members of the Class of 1904 were present and pictured in a group.

The Bulletin sets a high standard in its first two numbers.

* * *

The Nineteenth Annual Convention of the National Gastroenterological Association and the First Annual Convention of the American College of Gastroenterology will be held at The Shoreham in Washington, D. C., on October 25, 26 and 27, 1954. In addition to several interesting individual papers on gastroenterology and allied fields, the program will include a panel discussion on "Twenty-Five Years' Observation of the Gallbladder Controversy"; a panel discussion on "Amebiasis" by members of the staff of the National Institutes of Health, Bethesda, Maryland, and a symposium on "Esophageal Varices."

The Sixth Annual course in Postgraduate Gastroenterology, under the personal direction of Dr. Owen H. Wangensteen of Minneapolis, Minnesota, and Dr. I. Snapper of Brooklyn, New York, will be given on October 28, 29 and 30, 1954, at The Shoreham and Walter Reed Army Hospital. Participating in giving the Course will be a distinguished faculty from the various medical schools and the staff of Walter Reed Army Hospital.

This will be the last convention of the National Gastroenterological Association whose Fellowship have voted to become the American College of Gastroenterology. The scientific sessions on October 25, 26 and 27 are open to all physicians without charge. The Post-

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graduate Course will only be open to those who have matriculated in advance. Copies of the program and further information concerning the Postgraduate Course may be obtained by writing to: National Gastroenterological Association, 33 West 60th Street, New York 23, New York.

* * *

The Eighth Annual Fall Postgraduate Clinic of the Michigan Academy of General Practice will be held at the Sheraton-Cadillac Hotel in Detroit, November 10-11, 1954. There will be seventeen scientific papers read, and many scientific exhibits, all shown in Michigan for the first time, and all but two built expressly for this Post-Graduate Clinic. There will also be some forty-two technical exhibitors.

* * *

The Fourth Annual Meeting of state chairmen of the American Medical Education Foundation will be held at the Sheraton Hotel in Chicago on Sunday, January 23, 1955. Specific details regarding the proposed program and reservation forms for accommodations at the Sheraton Hotel will be distributed with the November Bulletin to AMEF state chairmen and regional auxiliary chairmen.

* * *

The Michigan Diabetes Society's panel discussion of September 29, held in Detroit during the MSMS annual session, included Frank Perkins, M.D., Detroit, as moderator, with the following participants: Jerome W. Conn, M.D., Ann Arbor; Richard M. McKean, M.D., Detroit, and Lawrence F. Segar, M.D., Detroit.

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Date	*Subject*	*Guests*
Aug. 8	Mental Health	Thomas A. Petty, M.D., Detroit Max Warren, M.D., Detroit
Aug. 15	Healthy Michigan	Willard Shepard, Lansing, Michigan Department Health Frank A. Karoly, Lansing, Michigan, Tourist Council
Aug. 22	Health Aspects of Civil Defense	C. P. Anderson, M.D., Detroit John E. Griffin, Lansing, Michigan, Civil Defense
Aug. 29	Nursing—A Professional Career	Virginia M. Null, R.N., Ann Arbor Elizabeth Moran, R.N., Detroit

FRANK C. WITTER

(Continued from Page 1154)

land Park General Hospital, a life-size portrait was commissioned and now hangs in the lobby of the Hospital.

Dr. Witter was a charter member of the American College of Surgeons and a member of the Founders Group of the American Board of Surgery. He was a past President of both the Detroit Academy of Surgery and the Detroit Obstetrical and Gynecological Society.

Dr. Witter is survived by his widow, Lena; his son, and a daughter, Mrs. Dorothy Redmond, of Birmingham.

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CORONARY HEART DISEASE IN YOUNG ADULTS. A Multidisciplinary Study by Menard M. Gertler, M.D., and Paul D. White, M.D., with the aid, advice, and editorial assistance of E. F. Bland, M.D., J. Fertig, Ph.D., S. M. Garn, Ph.D., J. Lerman, M.D., S. A. Levine, M.D., H. B. Sprague, M.D., and N. C. Turner, M.Sc. Published for the Commonwealth Fund at Cambridge, Massachusetts. Harvard University Press, 1954. Price $5.00.

This monograph is the study of coronary disease in 100 patients below the age of forty years. The study took over eight years to complete and is called a multidisciplinary study. Many facets of the problem are explored and although not conclusive, are speculative. Exhaustive and abundant study has gone into this project and established facts are reaffirmed and new conjecture throws light upon a perplexing problem.

The study was well controlled and covers the clinical appraisal, the role of heredity and race, anthropometric, occupation, endocrine and biochemical appraisals including the role of uric acid, cholesterol and phospholipids and the role they possibly play in coronary disease.

This monograph offers information which might make it possible to predict or prognosticate important implications.

The book provides important information which will be of great importance to the cardiologist, general practitioners, internists, field of public health, industrial medicine and life insurance.

V. B. L.

French's INDEX OF DIFFERENTIAL DIAGNOSIS. Edited by Arthur H. Douthwaite, M.D., F.R.C.P., Senior Physician, Guy's Hospital; Honorary Physician, All Saints' Hospital for the Genito-urinary Diseases. Seventh Edition. 731 illus. (200 in color). Baltimore: The Williams and Wilkins Company, 1954.

The new edition of the familiar French's Differential Diagnosis is now titled "Index of Differential Diagnosis," edited by A. H. Douthwaite, and is for the most part a rewritten text in which the symptoms are, as before, listed in alphabetical order to facilitate quick reference. Much obsolete material has been deleted and much new material added making it a much more concise volume than previous editions. The book is well supplied with charts, colored plates and illustrations enhancing its value and practical application.

Detail is adequate, yet it is not overburdened with extraneous material. It covers the entire field of medicine, surgery, gynecology, ophthalmology, dermatology and neurology. It should serve as a readily accessible reminder of the pathological significance of symptoms as they are presented each day to the busy physician.

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the entire field of differential diagnosis without criticism in one or another instance but the Index of Differential Diagnosis comes reasonably close to attaining that goal.

In the opinion of the reviewer this book would be a worthy addition to each hospital library for quick reference for the resident and interne staffs. Practitioners also might find it valuable in the office for the assurance to think of all the possible diseases to be considered in the patient with the obscure or even the common symptom combinations. On the other hand, this volume should not be the only reference material studied for the difficult diagnostic problem.

G.A.Z.

PARKINSONISM AND ITS TREATMENT. Edited by Lewis J. Doshay, M.D., M.A., Ph.D. Philadelphia, London, Montreal: J. B. Lippincott Company. Price $3.00.

This pocket-size monograph is a timely and welcome addition dealing with a disease entity which will become even more important in our aging population.

The text brings to the physician a small, compact discussion of the problem of parkinsonism. Contributions are made by leading anatomists, neuro-surgeons, neurologists regarding the anatomic and pathologic physiology considerations as well as etiologic factors.

The text is excellent in its discussion of drug therapy, which makes it of utmost value to the busy practitioner. The most recent drugs which have been added to the armamentarium of the physician are included as well as their specific action and drug combinations in the therapy of this neurologic affliction.

The surgical aspects, the role of physical medicine, and psychotherapeutic facets are also included.

The text is well indexed, concise, compact, and well illustrated. This book can be highly recommended for medical students, neurologists, general practitioners and internists.

V. B. L.

GLANDULAR PHYSIOLOGY AND THERAPY. Prepared under the auspices of the Council on Pharmacy and Chemistry of the AMA. Fifth Edition, completely revised and rewritten. Philadelphia, London, Montreal: J. B. Lippincott Company. Price $10.00.

This book represents the contributions of thirty-one leading physiologists and endocrinologists covering the field of endocrinology in a concise manner. The text is the epitome of endocrine physiology, endocrine derangement and their therapy by leading endocrine investigators. The text is completely devoid of clinical pictures, supplemented by excellent tables and figures. Concise, it covers the field of the endocrines and is easy reading.

The bibliography is voluminous, spanning the recent and not-so-recent literature.

Emphasis is placed on therapy preceded by anatomic and physiologic considerations and proceeding into endocrine derangement which leads to better understanding of the principles of treatment.

This text is comprehensive and contains the most recent advances in the field. The text goes beyond the

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field of pure endocrinology and includes the use of endocrines in neoplastic diseases. The book includes a chapter on abnormalities in sexual behavior and the use of adrenal steroids and corticotropin in non-endocrine conditions. The common misconceptions of endocrine therapy are well covered as well as diagnosis and the biochemistry of hormones.

This text can be recommended for the internist, general practitioner and obstetrician and gynecologist.

V. B. L.

RESEARCH PROJECTS

The National Institute of Health of the Public Health Service of the U. S. Department of Health, Education and Welfare has released the following report:

Stomach Absorption and Secretion

The stomach plays a more important role in the absorption and secretion of drugs than has heretofore been known, according to a study reported by scientists of the National Heart Institute of the Public Health Service, Department of Health, Education and Welfare.

The structure of the membrane of the stomach, how it acts and what makes it permeable to various drugs, is now much clearer as a result of studies conducted by Parkhurst A. Shore, C. Adrian M. Hogben and Bernard M. Brodie of the Heart Institute. Their work is reported recently at the Society for Pharmacology and Experimental Therapeutics, meeting in Charlottesville, Virginia.

In these studies, the stomach membrane is pictured as an oily barrier between gastric juice and blood plasma. Drugs may pass both ways through this membrane barrier. Alkaline drugs pass the barrier in the direction of the stomach and acid drugs pass the barrier in the direction of the blood stream.

Even when administered directly into the blood stream, alkaline drugs such as quinine and other alkaloids are found quickly and in surprisingly high concentrations in gastric juices of the stomach but are not absorbed well from the stomach. Acid drugs such as the barbiturates and aspirin are absorbed rapidly from the stomach but are not secreted to any great extent.

In between these acids and alkaloids are the neutral drugs, compounds which are intermediate. They are absorbed moderately from the stomach into the blood tream and secrete themselves moderately into the stomach.

In this study, different drugs which are representative of their class are being investigated, from strong alkaloids, to neutral compounds, and the acids. The rat stomach is separated from the rest of the gastrointestinal tract, a tube is inserted, and the drug in solution is introduced and allowed to stand a prescribed time. From 0 to 80 per cent of the drug is absorbed in one hour, depending on the physical characteristics of the drug.

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Surgery of Colon and Rectum, one week, October 25
Breast and Thyroid Surgery, one week, October 25
Thoracic Surgery, one week, October 11
Esophageal Surgery, one week, October 4
General Surgery, one week or two weeks, October 4
Gallbladder Surgery, ten hours, October 25
Fractures and Traumatic Surgery, two weeks, October 25
GYNECOLOGY—Office and Operative Gynecology, two weeks, October 18
Vaginal Approach to Pelvic Surgery, one week, November 1
OBSTETRICS—General and Surgical Obstetrics, two weeks, November 1
MEDICINE—Electrocardiography and Heart Disease, two weeks, October 11
Gastroenterology, two weeks, October 25
Gastroscopy, two weeks, November 8
RADIOLOGY—Diagnostic Course, two weeks, October 4
Clinical Uses of Radio Isotopes, two weeks, October 4
PEDIATRICS—Clinical Course, two weeks, by appointment
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*Greene, B. A.: The Place of Leather Soles in the Prevention of Anesthesia Explosions, Anesthesiology 13:203-206, March, 1952.

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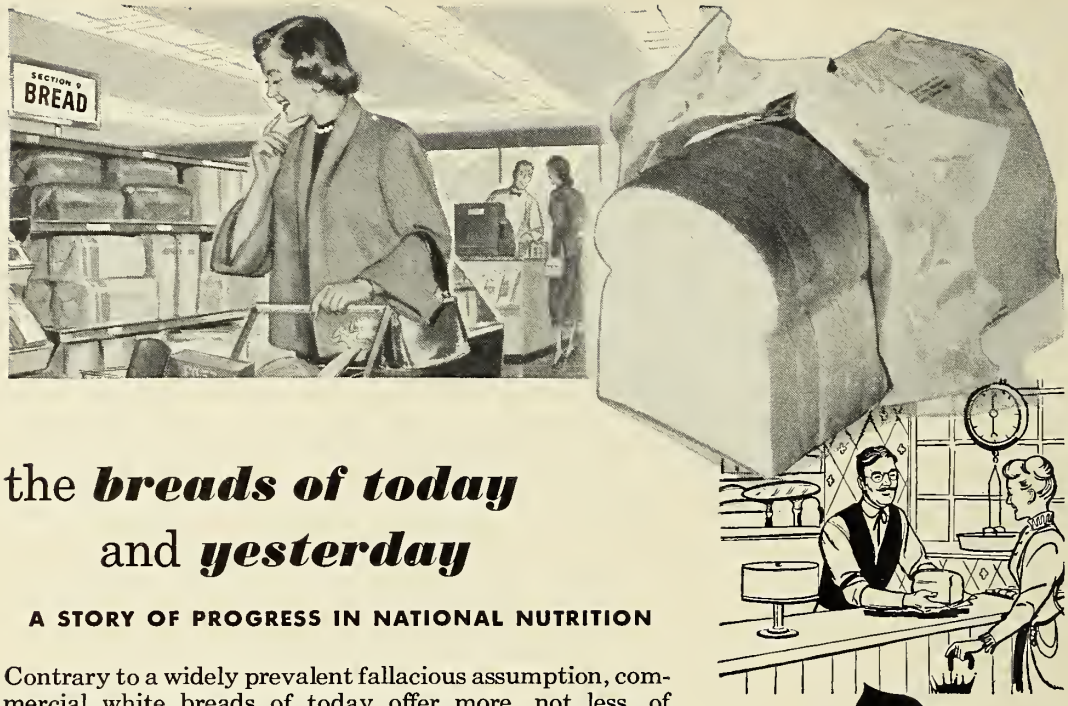
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1. Flour and Bread Enrichment, 1949-50: Prepared by The Committee on Cereals, Food and Nutrition Board, National Research Council, Washington, D.C., 1950.

2. Geddes, W.F.: Cereal Chemists Guard Nutrition, Agricultural and Food Chemistry *1*:38 (Apr.) 1953.

3. Bakery Products; Definitions and Standards of Identity, Federal Register *17*:4453 (May 15) 1952.

4. Sherman, H.C.: Chemistry of Food and Nutrition, ed. 8, New York, the Macmillan Company, 1952, p. 599.

5. Goddard, V.R., and Marshall, M.W.: The Calcium Content of Commercial White Bread, United States Department of Agriculture, Technical Bull. No. 1055, 1952.

Crespo, S., and Bradley, W.B.: Calcium and Milk Content of Commercial White Bread. Report by the Laboratories of the American Institute of Baking, Feb. 28, 1950.

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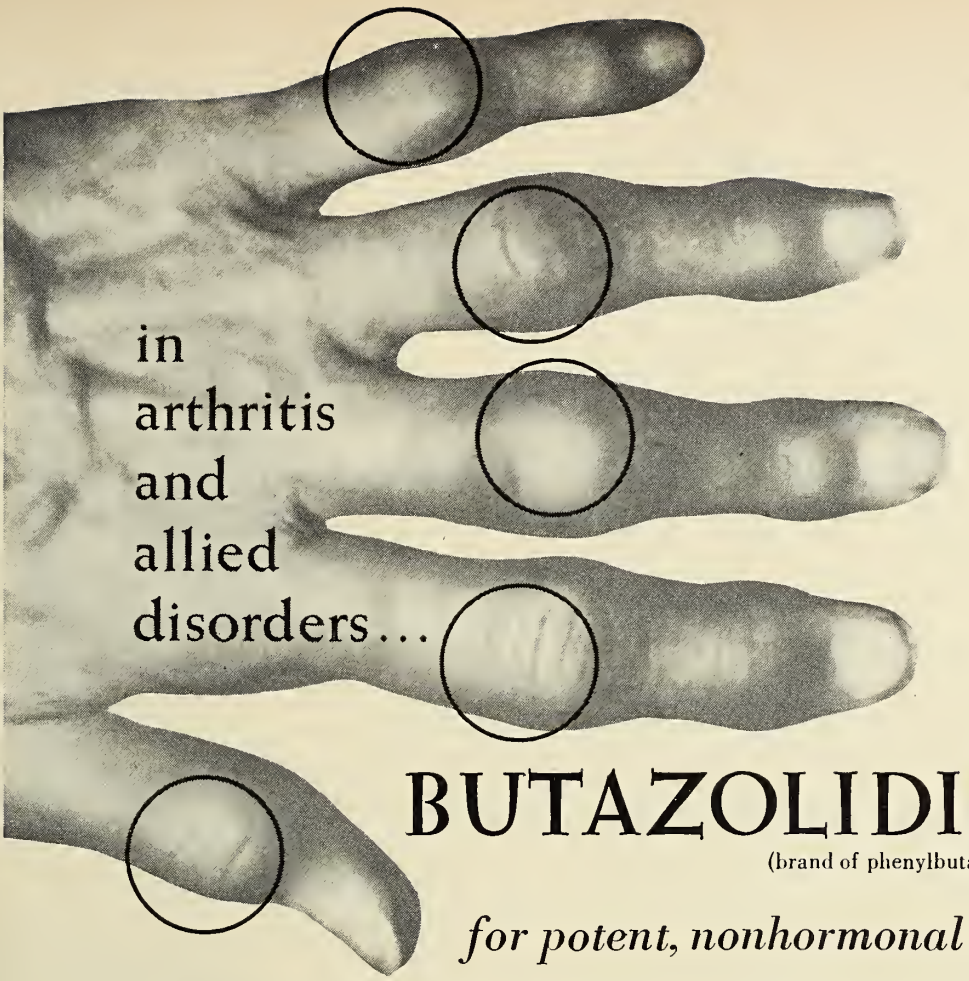
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September 26 and October 1, 1954

A total of eighty items was presented and discussed by the 25 members of the Council (18 Councilors, the President, President-Elect, Immediate Past President, Secretary, Treasurer, Speaker and Vice Speaker.) Eighty-six cumulative hours were contributed by these members of the Council to study and decide upon the problems facing the medical profession of Michigan, including:



Seated (left to right): L. W. Hull, M.D., Detroit; L. Fernald Foster, M.D., Bay City; R. H. Baker, M.D., Pontiac; William Bromme, M.D., Detroit; W. S. Jones, M.D., Menominee; William A. Hyland, M.D., Grand Rapids, and H. B. Zemmer, M.D., Lapeer.

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Standing (back row): B. M. Harris, M.D., Ypsilanti; R. W. Shook, M.D., Kalamazoo; F. H. Drummond, M.D., Kawkawlin; G. W. Slagle, M.D., Battle Creek; H. H. Hiscock, M.D., Flint; D. Bruce Wiley, M.D., Utica, and J. D. Miller, M.D., Grand Rapids. Absent on MSMS business: J. E. Livesay, M.D., Flint; Arch Walls, M.D., Detroit, and T. P. Wickliffe, M.D., Calumet.

- Reorganization of the Council: William Bromme, M.D., Detroit, was re-elected as Chairman; H. B. Zemmer, M.D., Lapeer, was again chosen as Vice Chairman; D. Bruce Wiley, M.D., Utica, was repeated as Chairman of the County Societies committee; G. B. Saltonstall, M.D., of Charlevoix was again given the post of Chairman of the Publication committee; Ralph W. Shook, M.D., Kalamazoo, was elected head of the Finance committee, taking the post left vacant by W. S. Jones, M.D., of Menominee who was chosen by the House of Delegates as MSMS President-Elect.

- The monthly financial reports were studied and approved as well as bills payable which were ordered paid.

(Continued on Page 1192)

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1. Allen, E.V.; Barker, N.W.; Hines, E.A., Jr.; Kvale, W.F.; Shick, R.M.; Gifford, R.W., Jr., and Estes, J.E., Jr.; Proc., Staff Meet. Mayo Clin. *29*:459 (Aug. 25) 1954.
2. Livesay, W.R.; Moyer, J.H., and Miller, S.I.: J.A.M.A. *155*:1027 (July 17) 1954.
3. Wilkins, R.W.: Mississippi Doctor *30*:359 (Apr.) 1953.
4. Kert, M.J.; Rosenfeld, S.; Mailman, R.H.; Westergart, J.P.; Carleton, H.G., and Hiscock, E.: Angiology *5*:318 (Aug.) 1954.

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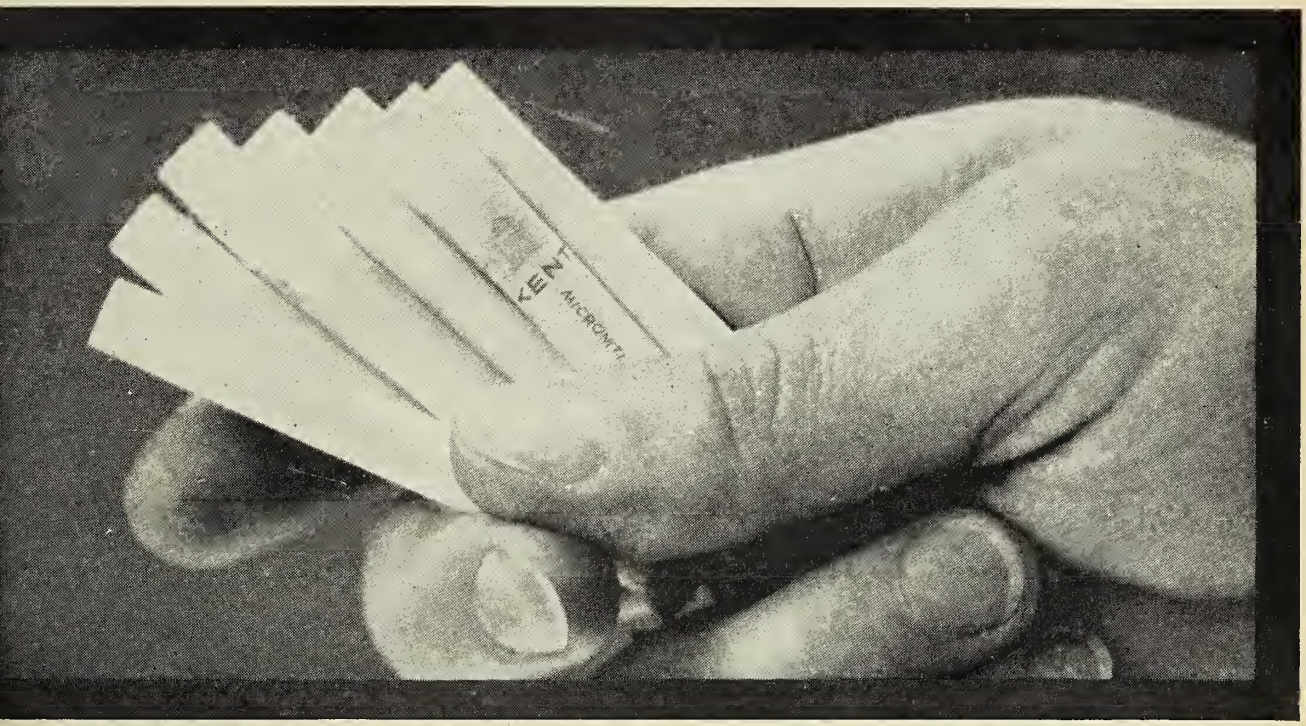
(Continued from Page 1190)

- Council Chairman Bromme's report included assignment of ubiquitous hosts appointed for distinguished guests attending the MSMS Annual Session, including representatives of nearby state medical societies and of the Canadian Medical Association; the Council chairman also urged all Councilors to promote periodic health appraisal in their individual Councilor districts, as per the ten-point program developed by the MSMS Periodic Health Appraisal committee; B. M. Harris, M.D., of Ypsilanti was appointed as MSMS representative-at-large to the United Health and Welfare Fund Medical Advisory committee; Chairman Bromme also appointed as MSMS representatives the following four members to the Michigan Cancer Co-ordinating committee: R. C. Hildreth, M.D.; William A. Hyland, M.D., Grand Rapids; E. T. Thieme, M.D., Ann Arbor; and J. M. Wellman, M.D., Lansing.

  The Chairman of the Council recommended a vote of congratulations to the Dow Chemical Company for its excellent television production "Medic" now being broadcast over NBC-TV Mondays at 9 p.m.; The Council authorized Dr. Bromme to thank the officials of Dow Chemical Company and to make arrangements for appropriate recognition to Dow on the occasion of the Michigan Clinical Institute, March 9-10-11, 1955.
- The request of the MSMS Geriatrics committee that 700 reprints of "Preventive Geriatrics" (from May 1954 JMSMS) be distributed, was approved.
- The Council changed the name of one of its committees from "Emergency Medical Service" to "Committee on National Defense" to coincide with the AMA designation of a similar committee on the national level.
- Bernard Patmos, M.D., Adrian, was appointed as MSMS representative to the Subcommittee on School Health Problems, a committee of the Michigan Department of Public Instruction; William Henry Gordon, M.D., Detroit, was appointed as MSMS representative to attend the Fifth National conference on Medical Civil Defense in Chicago October 30-31; Arthur E. Schiller, M.D., Detroit, was appointed as MSMS representative to attend the National Citizen's Committee for Educational Television, Lansing, in October.
- The University of Chicago and the Wayne County Medical Society were given official thanks for loan of important and historically valuable material displayed in the Beaumont Memorial during the past summer.
- Report of H. W. Bird, M.D., Detroit, on Conference on Mental Health, which he attended as MSMS representative in Chicago, was presented and accepted with thanks.
- The monthly progress reports of Rheumatic Fever Co-ordinator Leon DeVel, M.D., and of Public Relations Counsel H. W. Brenneman, were presented and approved.
- Otto O. Beck, M.D., chairman of the MSMS Beaumont Memorial Committee, presented a progress report on the Beaumont Memorial and requested instruction on completion of furnishing the building, in view of the present indebtedness of the Beaumont Memorial Fund to the Michigan State Medical Society. The Council adopted a motion that the Beaumont Memorial Committee be authorized to accept special gifts or monetary donations for continuing the Beaumont Memorial project, including the furnishing of the store and the securing of 62 medical books of the Beaumont era. An appeal for additional funds to wipe out the present indebtedness was ordered placed in the next Secretary's Letter addressed to all members.
- The Supplemental Report of the Council was read item by item, revised, and approved, with Councilor Robert S. Breakey, M.D., of Lansing, dissenting with Item 7 (Report on Salk Polio Vaccine action).
- Four matters referred to the Council by the 1954 House of Delegates were discussed at the October 1 meeting: (a) on resolution re: periodic health examinations in small hospitals—the Chairman of the Council was authorized to appoint a committee to study this matter and report back; (b) report of Basic Science Study commission as presented by H. A. Furlong, M.D., chairman, was accepted with thanks; (c) appointment of a committee to study prevention of highway accidents was announced by President R. H. Baker, M.D., as follows: J. R. Rodger, M.D., Bellaire, chairman; W. W. Babcock, M.D., Detroit; Austin Howard, M.D., Detroit; H. T. Johnson, M.D., Lansing; H. J. Meier, M.D., Coldwater; and C. L. Straith, M.D., Detroit; (d) Utilization of Blue Cross-Blue Shield was discussed and the study of attendant problems was ordered continued.
- Legal Counsel J. Joseph Herbert's report included opinion on artificial insemination of humans, which was ordered referred to Editor Wilfrid Haughey, M.D., for possible publication in JMSMS.
- Personnel of MSMS Committees for the year 1954-55 was presented by President Baker and approved by the Council.
- Report of Michigan Health Commissioner A. E. Heustis, M.D., included list of hospitals certified to Michigan Department of Social Welfare plus printed copies of Rules and Minimum Standards for Hospitals.

(Continued on Page 1196)

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The answer is simply this: Among today's nine brands of filter cigarettes, KENT, and KENT alone, has the *Micronite Filter*... made of a pure, dust-free material that is so safe, so effective it has been selected to help filter the air in hospital operating rooms.

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And yet, with all its superior protection, KENT's Micronite Filter lets smokers enjoy the full, satisfying flavor of fine, mellow tobaccos.

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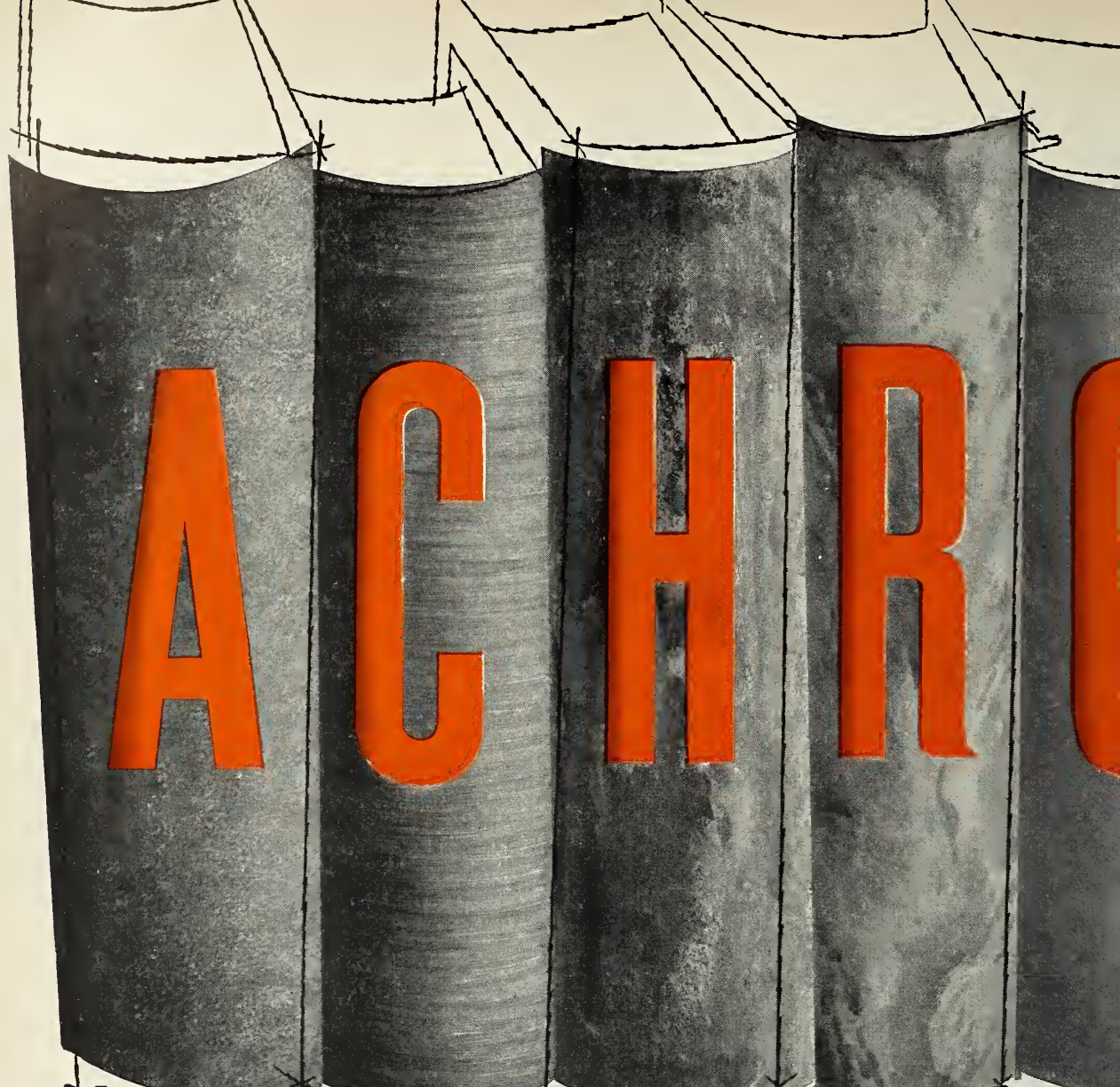


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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1192)

- Past Presidents club. Upon the recommendation of Councilor Breakey, Immediate Past President L. W. Hull, M.D., Detroit, was authorized to form an MSMS Past Presidents club and call a meeting of these doctors of medicine at his discretion.
- William A. Hyland, M.D., Grand Rapids, MSMS treasurer, was congratulated on being chosen one of six doctors of medicine throughout the United States to visit Germany for a three months' study of "Practice of German Medicine" in January-February-March, 1955.
- Committee reports—the following were given consideration: (a) Mental Health committee, meeting of August 26; (b) Public Relations committee, meeting of August 29; (c) Rheumatic Fever Control Committee, meeting of September 8; (d) Advisory Committee to Michigan Hospital Service, meeting of September 9; (e) Council Committee on Mediation, Ethics, and Grievance, meeting of September 26; (f) Awards committee, meeting of September 26; (g) County Societies Committee's of The Council, meeting of September 26.
- Michigan's Foremost Family Physician. The Council nominated the following doctors of medicine for the Foremost Family Physician award, the final selection to be made by the House of Delegates: C. J. Bloom, M.D., Muskegon; D. J. McColl, M.D., St. Clair; and J. H. Sherk, M.D., Midland.
- Record-breaking attendance at 1954 Annual Session. A motion of thanks to all who assisted in making the 1954 Annual Session an outstanding success was placed on the minutes of The Council; the Executive Director reported that the 1954 registration total was 3,904; this was 299 higher than the previous top mark.

A PR TIP FOR DOCTORS

HR 8300, the 875-page tax revision bill, was adopted by the House following agreement with Senate conferees. The bill permits the deduction of medical expenses exceeding 3 per cent (formerly 5 per cent) of adjusted gross income. Maximum deductions are also doubled. Drugs do not qualify as medical deduction items but drug expenditures in excess of 1 per cent of the adjusted gross may be deducted.

This provision in the Internal Revenue Code of 1954 offers opportunity for a fine service that physicians could render their patients, as suggested by Mac F. Cahal, executive director of the American Academy of General Practice, Kansas City, Missouri. The filling out of an income tax return is an onerous task at best. If a doctor's secretary or bookkeeper sent at the end of the year a memorandum of total expenses paid by those patients who incurred large bills, it would be a fine public relations gesture to thus remind them that the deduction of such medical expenses may reduce the patient's total tax.

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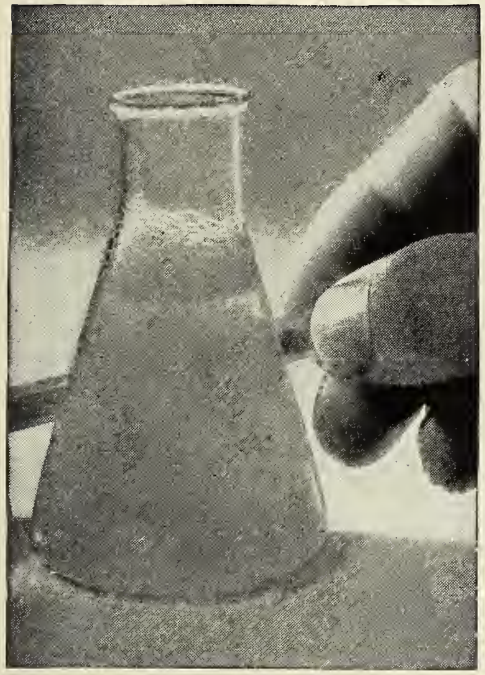
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After ½ hour in artificial gastric juice (pH 1.6), BICILLIN remains relatively insoluble, and is nearly 75% active. (BICILLIN used at a concentration of 2000 units per ml., approximating the antibiotic concentration in the stomach after a dose of 300,000 units.)

• Unlike other forms of penicillin, Oral BICILLIN requires no acid buffers to resist gastric destruction. This is because Oral BICILLIN is relatively insoluble. Acid tests[2] show that this insolubility persists for hours in artificial gastric juice (pH 1.6), that Oral BICILLIN retains full penicillin potency of its undissolved portion—71.7% after ½ hour, 31.1% after 3 hours, 18.1% after 6 hours.

Resistance to acid destruction is a surety factor in penicillin absorption—a safeguard for therapeutic effect.

Supplied: Oral Suspension BICILLIN: Bottles of 2 fl. oz.—300,000 units per 5-cc. teaspoonful; 150,000 units per 5-cc. teaspoonful. Tablets BICILLIN: Vials of 36—200,000 units per tablet; bottles of 100—100,000 units per tablet.

1. *American Medical Association: New and Nonofficial Remedies, 1954. J. B. Lippincott Co., Philadelphia, p. 147*
2. *Scott, R. L., and others: Antibiot. & Chemo. 4:691 (June) 1954*

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PENICILLIN WITH A SURETY FACTOR

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Heart Beats

MECHANICAL HEART PRESENTED TO SMITHSONIAN INSTITUTION

Another "Michigan Medical First" occurred September 9, 1954, when the Dodrill-GMR Mechanical Heart, first device of its kind in medical history to be used successfully on human patients undergoing heart surgery, was presented as a permanent exhibit to the Smithsonian Institution. The gift was initiated by a request from the Smithsonian's Division of Medical and Public Health, recognizing the importance of permanently preserving this significant contribution to medical history.

The device was developed by a Detroit medical-engineering research team headed by F. D. Dodrill, M.D. The vital research work was aided by a financial grant from the Michigan Heart Association and was carried out in the Research Division of Detroit's Harper Hospital. Engineering details and construction of the "heart" were done by General Motors Research Laboratories as a public service.

Use of the mechanical heart at Harper Hospital was designated one of the top ten scientific developments of 1952 by the National Association of Science Underwriters and it received the Hektoen Bronze Medal for original investigation from the American Medical Association at its annual meeting in New York in June, 1953.

In 1949 General Motors was asked by the Michigan Heart Association whether Dr. Dodrill's idea for an artificial heart could be implemented by building an experimental pump. Within the relatively short period of two and a half years the original model, henceforth property of the Smithsonian Institution, was designed, built, tested and successfully used on a human being as a mechanical bypass.

Besides the Dodrill-GMR Mechanical Heart, the Smithsonian exhibit also features another medical first. These are color photographs of heart valves taken during operations which show for the first time in medical history heart valves under direct vision in living humans.

Participating in the presentation were F. D. Dodrill, M.D., Detroit, member of the Board of Trustees of the Michigan Heart Association; Frank Van Schoick, M.D., Jackson, President of the Michigan Heart Association; C. L. McCuen, vice president of General Motors and General Manager of the GM Research Laboratories Division; Leonard Carmichael, M.D. secretary of the Smithsonian Institution; George Cartmill, director of Detroit's Harper Hospital, and E. V. Rippingille, Sr., consultant to GM Research Laboratories.



PARTICIPATING IN the presentation of the Dodrill-GMR mechanical heart to the Smithsonian Institution (left to right) are: F. D. Dodrill, M.D., Member of the Board of Trustees of the Michigan Heart Association; Leonard Carmichael, M.D., Secretary of the Smithsonian Institution; and C. L. McCuen, General Motors Vice President and General Manager of GM Research Laboratories.

The exhibit may be viewed in the Medical Gallery of the Smithsonian Arts and Industries Building in Washington, D. C.

HOWARD W. BLAKESLEE AWARD

The Second annual Howard W. Blakeslee Award of the American Heart Association for outstanding television reporting to the general public in the field of cardiovascular disease was presented Tuesday, September 14, 1954, at the Second World Congress of Cardiology and Twenty-Seventh Scientific session of the American Heart Association.

The Award was presented by E. Cowles Andrus, M.D., president of the American Heart Association to the "American Inventory," for "The Mechanical Heart," a documentary television program. telecast on NBC-TV and originating from Harper Hospital in Detroit, February 15, 1953. The program was produced by the Alfred P. Sloan Foundation and the staff of WWJ-TV, Detroit, in co-operation with the Michigan Heart Association and the General Motors Corporation.

(Continued on Page 1200)

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- neurasthenia
- mild psychoses
- hysteria
- hyperthyroidism
- migraine
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- hyperemesis gravidarum
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DOSAGE:

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HOW SUPPLIED:

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HOWARD W. BLAKESLEE AWARD

(Continued from Page 1198)

Dr. Andrus declared that this documentary presentation gave millions of Americans a view of the mechanical heart developed by Forest D. Dodrill, M.D., and his staff in Detroit, thereby providing them with a "new and absorbing insight into the meaning and problems of heart research." The citation for this Award stated that the program, "presenting an important advance of medical science and giving emphasis to the cooperative nature of cardiovascular research, is selected as the year's foremost contribution of television to public understanding of progress in the fight against heart disease."

ANTIBLOOD CLOTTING DRUGS EFFECTIVE

Drugs which check the formation of blood clots are proving effective in reducing the death rate among patients who have suffered a recent heart attack, according to the findings of a Committee on Anticoagulants appointed by the American Heart Association to conduct an extensive study of these drugs. The 680-page report of the committee, entitled, "Myocardial Infarction: A study of 1031 Cases; Its Clinical Manifestations and Treatment with Anticoagulants," was published recently.

F. Janney Smith, M.D., Detroit, a past president of the Michigan Heart Association, served on the Committee and was one of the research investigators participating in the study.

"The findings are extremely valuable," Dr. Smith said, "and represent the best analysis to date, from a statistical standpoint, on the subject of myocardial infarction. I strongly recommend that every cardiologist have this report in his library."

The Committee on Anticoagulants found that among 1,031 patients who had suffered heart attacks and who had survived the first twenty-four hours in a hospital, a one-third drop in the death rate from heart attacks was achieved, and there was an even greater drop in the complications to which patients suffering heart attacks are susceptible.

The Committee was established by the American Heart Association in 1946, following initial reports of experience with anticoagulants which indicated that they might influence favorably the outcome of heart attacks. The Committee drew up a plan for a co-operative study in which sixteen hospitals participated, so that wide experience with these drugs could be acquired within a relatively short time and data accumulated which could be subjected to detailed statistical analysis. Under the plan, patients suffering from heart attacks, admitted to the co-operating hospitals on odd days of the month, were treated with anticoagulants in addition to all standard therapy. Patients admitted on even days served as controls, receiving similar therapy except for the omission of anticoagulants. Cases dying within twenty-four hours after hospitalization were not included in this study. Eventually there were 589 cases in the treated group, 442 in the control group, or a total of 1,031. All patients were followed consistently for six weeks, with the hospitals reporting their detailed observations to a central laboratory, the New York Hospital Vascular Disease Research Laboratory, New York, of which Irving S. Wright, M.D., is Director.

Analysis of records thus acquired over a two-year period showed that in the untreated control group, 23.4 per cent of the patients died within six weeks, while in the treated group, only 16.0 per cent died during the same period—a drop of approximately one-third.

Complications occurred at the rate of 42 per hundred cases among the controls during the six-week period. In the treated group there were only 13 complications per hundred cases—a drop of more than two-thirds.

According to the Committee, the findings of the study did not support the view that anticoagulant therapy should be reserved for only those patients who appear severely ill at the onset of a heart attack. The death rate among the mildly or moderately ill cases dropped by one-half; it was seven per cent in the treated group as compared with 14 per cent among the controls. Among cases classified as "good risks," the death rate was below two per cent in both groups. Yet the rate of complications among the controls remained at a high level—29 per hundred cases—in contrast with nine per hundred in the untreated group.

The only unfavorable consequence of anticoagulant therapy noted in the study was an increase in episodes of bleeding, or hemorrhage. To minimize the danger of hemorrhage, the Committee's report specifies conditions under which the blood-thinning drugs should be used cautiously or withheld altogether. It also outlines measures which the physician can take if bleeding occurs in spite of all precautions. When anticoagulants are correctly used, the report concludes, the risk of hemorrhage is not excessive, is reduced as the physician gains experience and is greatly outweighed by the net reduction in deaths achieved through treatment with these drugs.

A preliminary report on the study, based on the first 800 cases, was published in 1948. The present volume provides a full analysis of the entire series of cases, and includes 180 statistical charts and other illustrative material.

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world's largest producer of antibiotics, discoverers of oxytetracycline and the first to describe the structure of tetracycline, a nucleus of modern broad-spectrum antibiotic therapy.

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For well-tolerated therapy of such common infections as:

Pneumococcal infections, including pneumonia, with or without bacteremia; streptococcal infections, with or without bacteremia, including follicular tonsillitis, septic sore throat, scarlet fever, pharyngitis, cellulitis, urinary tract infections due to susceptible organisms, and meningitis; many staphylococcal infections, with or without bacteremia, including furunculosis, septicemia, abscesses, impetigo, acute otitis media, ophthalmic infections, susceptible urinary tract infections, bronchopulmonary infections, acute bronchitis, pharyngitis, laryngotracheitis, tracheobronchitis, sinusitis, tonsillitis, otitis media, and osteomyelitis; certain mixed bacterial infections; soft tissue infections due to susceptible organisms.

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AMA Washington Letter

THE MONTH IN WASHINGTON

Although the elections back home are more stimulating than Washington doings these fall weeks, some of the quiet planning going on at the Pentagon should be of more than passing interest to physicians, young and old. The objectives are familiar: first, to insure a steady supply of physicians for the services, and second, to improve the medical care program for military dependents. Primarily responsible for working things out are Dr. Frank Berry, assistant secretary of defense for medical affairs, and the officers assisting him.

To insure that the services will get the physicians they need after the scheduled expiration of the Doctor Draft Act next July 1—without disrupting residency training—a plan bearing the formidable name of the Armed Forces Reserve Medical Officer Commissioning and Residency Consideration program has been put into effect. It applies only to interns who have had no prior military service, and who therefore have a two-year obligation for service under the regular draft.

The plan's first deadline was October 10. By that time these young physicians were to have sent in to the Defense department a form with the following information: Their first, second, and third choices among the services, whether they wanted additional deferment for residencies and if so choice of hospitals, and the preferred specialties. Any in this group who do not apply for reserve commissions will be subject to the regular draft, will not be considered for residency deferments, and will not have a choice of services.

There is another problem involved. It is estimated that about half of the interns will want residency deferments. However, not more than a quarter can be deferred if the Army, Navy, and Air Force are to get their quotas of physicians. This is being resolved by a lottery. Those winning deferments will stay in the reserves, and be called up for duty as their specialties are needed after the completion of their residencies. Those losing out will be called as needed at the end of their internships. The 50 per cent not asking for deferments will be allowed a choice of the month to be called up, a privilege not accorded the others.

On the dependent medical care program, Dr. Berry's annual report discloses that the Department is all set to put the expanded plan into operation, should Congress enact it. An implementing directive has been drawn up, a tentative fee schedule modeled on the VA "Guide for Medical Services" has been prepared, and a uniform "Military Dependent Identification Card" has been developed and placed in limited use by the Navy and Air Force.

A dependent care bill was introduced last session, but not pressed by Defense department. It provides a uniform program for the three services, with dependents defined and the extent of care limited. It also would have the military medical departments taking care of all the dependents they could handle, with only the remainder going to private physicians and hospitals. The American Medical Association believes this should be reversed, with emphasis on private, non-government care for dependents.

The Defense department is interested in other devices to keep up the quality as well as the number of its physicians. One of these is a scholarship program, which would require one year of military service for each scholarship year. Because regular draft time could be served out this way, any scholarship contract would call for a minimum of three years' active duty. The Department has high hopes that this program will be authorized by the next Congress. It also is hopeful that, once in operation, the scholarship contracts would result in more young physicians joining the regular Army.

Meanwhile the Hoover Commission on Organization of the Executive Branch and the Kestnbaum Commission on Intergovernmental Relations continue with their studies and report-writing, efforts that now are definitely unspectacular but that ultimately could mean important changes in the government's medical programs.

(Continued on Page 1208)

Meat...

and Its Contribution to Fat Needs

Fat, the most concentrated source of nutrient energy, constitutes a dietary essential in human nutrition.[1] It is needed in growth and replacement of tissues, for specific lipid secretions, and for providing physiologic energy.[1,2] Absorbed fatty acids may be incorporated into more complex lipids, deposited in adipose tissue, converted into other fatty acids, used in production of milk fat, transformed into glucose or glycogen, or oxidized to carbon dioxide and water with liberation of energy.[3]

Evidence indicates that long continued extremely low fat intake in adults is incompatible with good health.[4,a] In addition to protecting tissue protein against catabolism for energy needs (the protein-sparing action of fat), sufficient amounts of fat in the dietary promote storage of protein.[4,b] In a normal mixed diet, fat is about 95 per cent as efficient as carbohydrate for production of muscular work.[4,c]

Neither the optimal level of fat in the diet nor the optimal range for apportionment of fat and carbohydrate to meet calorie allowances is known.[1,2]

Contrary to general impressions, fat in the mixed diet is effectively digested.[4,d] In moderate amounts it does not appreciably influence the digestibility of other foods.[5] Fat enhances the satiety value of meals, and foods naturally containing fat and those prepared with fat add much to the flavor value of meals. High fat diets sometimes are useful in alleviating constipation.[6]

Meat, according to its kind and cut, provides variable amounts of fat which contribute importantly to the body's need for fat. The fat of meat is almost completely digested. Meat also supplies valuable amounts of high biologic quality protein, B vitamins, and essential minerals. Skeletal muscle meat contains less than 0.1 per cent of cholesterol.[7]

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3. Ekstein, H. C.: Fat in Nutrition, in Handbook of Nutrition, A Symposium, ed. 2, Philadelphia, The Blakiston Company, 1951, p. 23.
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7. Okey, R.: Cholesterol Content of Foods, J. Am. Dietet. A. *21*:341 (June) 1945.

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PR REPORT

MSMS HAS A "HIT" on its hands in the new color movie on medical associates, "In Planning Your Career." Filmed in Bay City and Lansing on a surprisingly low budget, the motion picture is designed for double duty. It may be used by vocational guidance counselors working with high school and early college students, or at the "Career" Day programs sponsored in schools throughout Michigan. Beyond that, it is carefully timed to 13½ minutes, so that it can be used on a 15-minute television show, or incorporated into a longer TV program. In preview showings, spectators expressed highest opinions of the new production.

Finished prints are expected to be available at MSMS offices in Lansing and Detroit by late November. Any member of MSMS or the Woman's Auxiliary interested in showing it to school, church or civic groups may make arrangements through the MSMS Public Relations Department.

To increase the recruitment impact of the film, the widely known MSMS brochure on medical associates is being brought up to date with a third printing. Quantities of the booklet will be available to supplement the movie when it is shown before young people's groups.

THE DETROIT NEWS and two of its science reporters, along with five other Michigan daily newspapers, will receive special MSMS awards at the time of the 1955 Michigan Clinical Institute for their service in promoting better public understanding in the fields of medicine and health. The awards were voted by The Council upon recommendation of the Awards Committee, headed by L. Fernald Foster, M.D., of Bay City.

The *News* was selected to receive the MSMS Award for Excellence in Medical Reporting, a periodic award inaugurated last year. Individual supporting awards will go to two members of the *News* staff: Merle Oliver, for his coverage of medical news on the local and state levels, and Allen Shoenfield, for his reporting of national events of scientific importance.

Five other dailies were selected to receive special awards for distinguished service to health by their co-sponsorship of successful community health forums during 1953-54 in co-operation with county medical societies in their localities. They are the *Ann Arbor Evening News, Detroit Free Press, Grand Rapids Press, Jackson Citizen Patriot,* and *Kalamazoo Gazette.*

A NEW FILM LIBRARY which will enable MSMS to supply a 13-week package of 15-minute shows for presentation on local TV stations under auspices of county medical societies is being built up under the Radio-TV Subcommittee of the Public Relations Committee. Augmenting the films actually produced by MSMS will be several purchased or borrowed from other agencies. Chairman A. E. Schiller, M.D., will be glad to have any recommendations for suitable films forwarded to the PR Department. The films should be 12 to 14 minutes in length, or adaptable for editing to this length. It is planned that the package will be available by the first of the year.

MSMS PUBLIC RELATIONS committemen and members of the field staff are in the midst of a series of meetings with officers and PR commitees of medical societies in key counties to evaluate the extent of current PR activities at the county level. The meetings are designed to stimulate or expand local PR programs, and to emphasize the fact that MSMS stands ready to offer PR aid to any county society requesting it. Foundation for the current program are the 26 specific PR activities and projects outlined in the guidebook supplied to all local societies "Winning Friends for Medicine."

A ROUNDUP OF PR ADVANCES in the past year in communities throughout the nation is to be featured at the AMA's Seventh National Medical Public Relations Conference in Miami on November 28, one day in advance of the Clinical Session.

This conference is designed for doctors who are concerned with PR policy decisions. It is not to be confused with the Third Annual AMA

(Continued on Page 1222)



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Editorial Opinion

PRESIDENT'S MESSAGE

As a part of its expanding program in Public Relations, the Ingham County Medical Society is cosponsoring a series of medical forums in co-operation with the Lansing State Journal, the Community Services Council and the Adult Education Center, Lansing Board of Education.

Meetings of this type have been sponsored by other medical societies throughout the state and the nation and have been a very successful method of public contact and of dissemination of authentic medical information.

Public Relations is everyone's business. The Public Relations committee has done an excellent job in the planning and promotion of the project. In the final analysis, however, the success of the project depends on the co-operation and active assistance of every member of the Society. The Society is justifiably proud of its accomplishments in the field of postgraduate medical education. Let us be equally proud of our accomplishments in the field of public education.—H. E. Cope, M.D., *Bulletin, Ingham County Medical Society*, October, 1954.

COUNCILOR'S LETTER

Our profession is currently being criticized in two different localities in the state by reactionary groups who are definitely in the minority.

In Oakland County, the mayor of Hazel Park criticized two doctors who were called at six in the morning to treat a child who was seriously ill. It was reported that both physicians refused to make the call, and the child died. After investigation, it was found that one physician ordered the child to the hospital and promised to meet the patient there. The other was not informed of the seriousness of the illness and offered to go to his office and wait for the parents to arrive with the child. The President of the Oakland County Medical Society has not yet received a written complaint from the parents, just a news release from the mayor, obviously "politics" on the part of the mayor.

In the second instance, it was reported that a child was being held in the Van Buren County Hospital at eight dollars a day, until the father paid the hospital bill. After court action, the child was released to the parents. The Van Buren County Hospital is operated by the county welfare department and has no connection with the private practice of medicine. It is "government medicine" in the last analysis.

Neither of these cases is the basis for legitimate criticism of the profession, yet there will be some who are anxious to throw mud at the very group who, among many achievements in behalf of humanity, is responsible for the longest life expectancy in the world's history.

Let us continue to so conduct ourselves that there will be no basis for even unjust criticism.—William M. LeFevre, M.D., Councilor, 11th District, *Muskegon County Medical Society Bulletin*, September, 1954.

THE DECLINE OF THE HOUSE CALL

Once the standard symbol of the medical practitioner, the little black bag seems headed for a museum. The house call is coming to account for less and less of the doctors' practice. The horse-and-buggy doctor would have included the maintenance of both the horse and buggy in his income tax deduction if they had income tax in those days. Making calls was a large part of his practice.

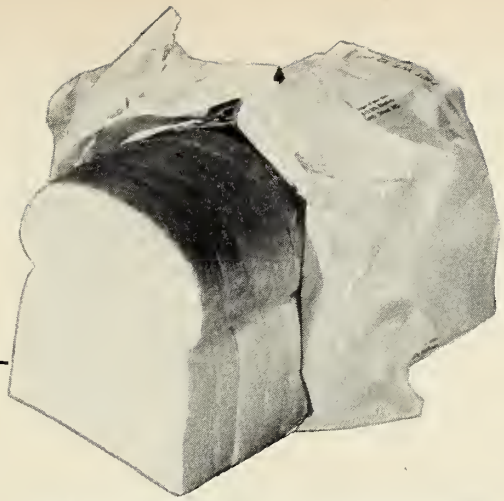
Now that transportation has become swifter, the doctors' need for it has become less. Some physicians practically never make house calls. Others do so with great reluctance and impose on the patient such discouraging obstacles as higher fees and tardy arrivals.

The reasons for this reluctance to make house calls are that the doctor is too busy, that equipment in the office is better or that the patient is not as sick as he thinks. This is quite in line with the trend of the times. Probably nothing that can be said or done now will reverse the trend. However, before the house call becomes completely extinct we would like to utter this requiem.

There is nothing quite as challenging as a closed door. The doctor who has never waited for the door to open has lost out on one of life's interesting experiences. With today's modern diagnostic equipment it is much easier than it used to be to

(Continued on Page 1208)

what does BREAD *contribute?*



Some thirteen years ago the baking industry began large-scale, nationwide commercial production of enriched breads. Today such breads represent about three-fourths or more of all the marketed white bread in the United States,[1] and rank high among the foods which contribute essential nutrients—in important amounts—at low cost—to the nutrition of the American people.[2]

It is not so long since deficiencies of certain B vitamins and iron were regarded as sufficiently widespread in the United States to merit serious attention. By providing broad distribution of these important nutrients in effective amounts, commercial enriched breads have contributed notably to reducing the incidence of these deficiencies,[1] as reported for instance among patients of charity clinics throughout the country.[3] It is authoritatively believed that the enrichment of bread has improved the health of a large segment of our population.[4]

Per pound, enriched breads today contribute—as required by government definition and standards of identity[5]—at least 1.1 mg. of thiamine, 0.7 mg. of riboflavin, 10 mg. of niacin, and 8 mg. of iron. Thus they are distinctly superior to home-made as well as bakers' white breads of former years.

Each pound of commercial enriched breads contributes also 39 Gm. of protein—wheat flour protein supplemented with milk protein—biologically applicable to growth as well as to tissue maintenance.

Another significant contribution of such breads is 400 mg. of calcium per pound.[6] Last not least, and rather to be praised than to be deprecated, is the low-cost contribution of calories which bread makes to energy needs.

The appended table shows the important amounts of six essential nutrients contributed by 5½ ounces of marketed enriched breads. The table also shows the notable percentages of the National Research Council's recommended daily allowances this small amount of present-day enriched breads represent.

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NUTRIENTS AND CALORIES CONTRIBUTED BY 5½ OUNCES OF ENRICHED BREAD AND THEIR PERCENTAGES OF RECOMMENDED DAILY DIETARY ALLOWANCES*

Nutrients and Calories	Protein	Thiamine	Riboflavin	Niacin	Iron	Calcium	Calories
Amounts	13.3 Gm.[7]	0.37 mg.[7]	0.23 mg.[7]	3.4 mg.[7]	4.1 mg.[6]	137 mg.[6]	429[7]
Percentages of Allowances	20%	25%	14%	23%	34%	17%	15%

*Doily dietory allowances (1953) recommended by National Research Council for a foirly active man 45 years of oge, 67 inches in height, ond weighing 143 pounds.

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1. Geddes, W.F.: Cereal Chemists Guard Nutrition, Agricultural and Food Chemistry *1*:38 (Apr.) 1953.
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3. Flour and Bread Enrichment, 1949-50: Prepared by The Committee on Cereals, Food and Nutrition Board, National Research Council, 1950.
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THE DECLINE OF THE HOUSE CALL

(Continued from Page 1206)

make a diagnosis. But in the home, the doctor must make a diagnosis with only the simple equipment he can carry in the bag plus his eyes, his ears, his fingers, his medical training and, one hopes, his God-given common sense. If he can do that, he is really playing in medicine's major league!

A patient sends for a doctor only when he considers himself in trouble. The doctor who responds is viewed as a friend in deed. Many harsh things have been said about medical practitioners during the last two decades. But no one ever says them about the doctor who is willing to reply to a cry for help by making a call to the home. Such a call may be time taking, economically profitless and subject to certain technical and scientific deficiencies. It is a cheerful symbol of service to people in trouble—a service which is the glory and the touchstone of our creed.—Editorial, *The Journal of the Medical Society of the State of New Jersey,* August, 1954.

GRASS ROOTS AND DEMOCRACY

Some of the members of our society have recently expressed a wholesome concern regarding the public statements and policies of the American Medical Association as expressed by its spokesmen. It is thought that the policies and opinions given out by the American Medical Association spokesmen may not represent the views of the majority of its members. It is entirely proper to raise this question.

Much information concerning current activities and problems is presented in the *Journal of the American Medical Association* and in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. In the past some problems have been referred by the American Medical Association to the various State Societies who have in turn referred them to their constituent County Societies and the views of the County Societies transmitted to the State Societies and thence to the American Medical Association. In other instances actions initiated in County Societies have been transmitted through their State Societies to the American Medical Association. These processes have been employed recently in our own State and County Societies.

Obviously, however, some previously unforeseen problems are so urgent that the American Medical Association officers must make decisions and formulate policies quickly without taking the time required for getting expressions from the membership through the State and County Societies. In addition, resolutions are sometimes presented at the meetings of the American Medical Association or State House of Delegates, without prior notice. These are often controversial. Obviously it is not possible for the delegates to be instructed by the Societies which they represent with regard to such unforeseen actions. Under these circumstances the delegates must use their own best judgment. The delegates are experienced in medical society matters and their actions usually reflect the views of those whom they represent. If they are often wrong the remedy lies in the next election of delegates.

Those comments of your President are offered because of the deep interest of your Executive Council in this important problem.—PAUL S. BARKER, President, *Washtenaw County Medical Society Bulletin,* October, 1943.

AMA WASHINGTON LETTER

(Continued from Page 1202)

The Hoover Medical task force is nearing the end of its long review of all federal medical operations. Its recommendations will be submitted to the full commission for consideration in the commission's report to the President, due at the White House next May.

The Kestnbaum commission's work of greatest medical interest is the study of health grants-in-aid, on which a special committee has just completed its report. The full commission is scheduled to report back to Congress by next March.

One must never forget the importance of the genetic and often-observed familial predisposition to cancer.

* * *

Despite the lack of proof that estrogens play a definite role in the production of breast or fundal cancer, it would seem advisable to be particularly sparing in any use of estrogens when there is a strong hereditary background of cancer.

* * *

It is imperative to establish the exact nature by tissue diagnosis of every visible lung lesion.

* * *

A stationary silent lesion that does not change in configuration during a period of observation does not rule out cancer of the lung.

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Postgraduate Medical Education

Fellowship Awards Granted MSMS Members

The following members of the Michigan State Medical Society were granted Fellowship and Associate Fellowship certificates in Postgraduate Medical Education during the year 1954:

Fellowships

Burnell H. Adams, Flint; W. R. Ballard, Bay City; Fleming A. Barbour, Flint; Arthur L. Benedict, Muskegon; Arthur W. Boddie, Detroit; Milo J. Brady, St. Clair Shores; Moses Cooperstock, Marquette; Kenneth L. Crawford, Kalamazoo; Luther W. Day, Jonesville; Robert E. Fisher, Bay City; John V. Fopeano, Kalamazoo; John A. Freel, Bay City; Frank W. Garber, Muskegon; Ledru O. Geib, Detroit; Martha H. Goltz, Montague.

Alexander B. Gwinn, Hastings; James W. Hall, Traverse City; Ruth B. Hamady, Flint; Gertrude E. Howe, Sault Ste. Marie; Lloyd W. Howe, Marquette; Arthur A. Humphrey, Battle Creek; Martin J. Ittner, Midland; Edward H. Lauppe, Detroit; Simon Levin, Houghton; Orlen J. Johnson, Bay City; Maurice J. Lieberthal, Ironwood; Charles W. McColl, Wyandotte; Oliver B. McGillicuddy, Lansing; Miar J. McLaughlin, Jackson; Nathan H. Moss, Detroit; Nathan D. Munro, Jackson; David J. O'Brien, Lapeer; Constantine L. A. Oden, Muskegon; Earle S. Oldham, Breckenridge; John W. Parnell, Grosse Pointe Woods; Archibald C. Pfeifer, Mt. Morris; Clarence J. Poppen, East Lansing; Earl S. Rhind, Sault Ste. Marie; Herbert F. Robb, Belleville.

John L. Rosefield, M.D., Detroit; Clark W. Royer, Battle Creek; George D. Sutton, Flint; Nelson M. Taylor, Grosse Pointe; Tom B. Thompson, Jackson; Edward T. Torwick, Jackson; Edward E. Vivirski, Jackson; Hymen A. Vogel, Garden City; Edward H. Wagenaar, Muskegon; Warren S. Wallace, Jackson; Leroy J. Wallen, Sault Ste. Marie; Harold W. Woughter, Flint.

Associate Fellowships

Earl R. Addison, Crystal Falls; Arthur L. Amolsch, Marquette; Ralph V. August, Muskegon Heights; Herman K. Butterworth, Lincoln Park; James E. Cole, Detroit; John A. Cowan, Lansing; James R. Dehlin, Gladstone; Harry F. Dibble, Detroit; Albert O. Engstrom, Whitehall; Lee E. Feldkamp, Detroit; Ray L. Fellers, Detroit; Norman A. Fleishman, Muskegon; Leonard Fox, Wyandotte; John R. Franck, Wakefield; Mary Margaret Frazer, Detroit; J. Courtney Fremont, Detroit; James H. Fyvie, Manistique; Louis J. Gariepy, Detroit; Dunbar P. Gibson, Detroit.

James L. Gillard, Muskegon; Abraham H. Grant, Detroit; Herbert E. Hamel, St. Ignace; John M. Hammer, Parchment; Fred V. Hauser, Flint; Edward A. Hier, Alpena; Glenn W. House, Jr., Greenville; James W. Hubly, Battle Creek; Rodger S. Huckins, Bay City; Maurice E. Hunt, Jackson; Raymond C. Husband, Detroit; Ralph A. Johnson, Detroit; W. S. Jones, Jr., Menominee; Ned B. Kalder, Detroit; Thomas J. Kane, Muskegon; Karm C. Kerwell, Stephenson; John D. Kilian, Midland; Frederick E. Kolb, Calumet; Alfred C. LaBine, Houghton; Leonard W. Lang, Detroit; James J. Lightbody, Detroit; Claude A. Ludwig, Port Huron; Sydney N. Lyttle, Flint; Thomas S. McInerney, Escanaba; Don W. McLean, Detroit; John A. MacNeal, Hillsdale; Frank R. Markey, Detroit; James R. Marshall, Detroit; Marvin B. Meengs, Muskegon; John G. Milliken, Traverse City; Marlin K. Morris, Lansing; Francis J. O'Donnell, Alpena; Louisa I. Piccone, E. Dearborn; Donald G. Pike, Traverse City; Otto J. Preston, Flint; F. P. Rhoades, Detroit; Howard Robinson, Detroit; Abraham S. Rogoff, Detroit; Samuel H. Rutledge, Lansing; Robert E. Ryde, Escanaba; Dayton D. Salon, Traverse City; Florian J. Santini, Ironwood, Walter A. Schmutzler, Norbert W. Scholle, Muskegon Heights; John M. Schroeder, Iron Mountain; Richard Sears, Muskegon.

Max Silverman, Detroit; Milton E. Slagh, Saranac; Paul Stuart Sloan, Houghton; James E. Spens, Alpena; William H. Stokes. Lake City; Fred L. Strickroot, Detroit; Andrew L. Swinton, Marquette; Malcolm J. J. Tear, Detroit; Wallace R. Teed, Ann Arbor; Elmer C. Texter, Detroit; Richard L. Thirlby, Traverse City; E. C. Timmerman, Coopersville; Israel Wiener, Detroit; Earl C. Wilson, Harrison; George H. Wynn, Adrian.

DOCTOR DRAFT REGISTRANTS MAY BE RE-ASSIGNED TO ARMY READY RESERVE UNITS

Reserve physicians and dentists who are not currently under orders for active military duty may join the Ready Reserve Units of the Army Medical Service, according to an announcement by Major General George E. Armstrong, Army Surgeon General.

This will be accomplished by permitting the special registrants under the Doctor Draft Act and others who are in a USAR Control Group to be transferred immediately to fill an authorized vacancy in a Ready Reserve Unit. Formerly, such a re-assignment was prohibited prior to the completion of a tour of extended active duty.

Although transferred, the officer will still be subject to an order to active duty without his consent as an individual classified under the Doctor Draft and will be subject also to an order to active duty as a member of the unit.

The transfer, however, is entirely voluntary and will be made only if the physician or dentist so desires.

An estimate of the posible number available for such re-assignment totals more than 900 Medical Corps officers and 183 Dental Corps officers.

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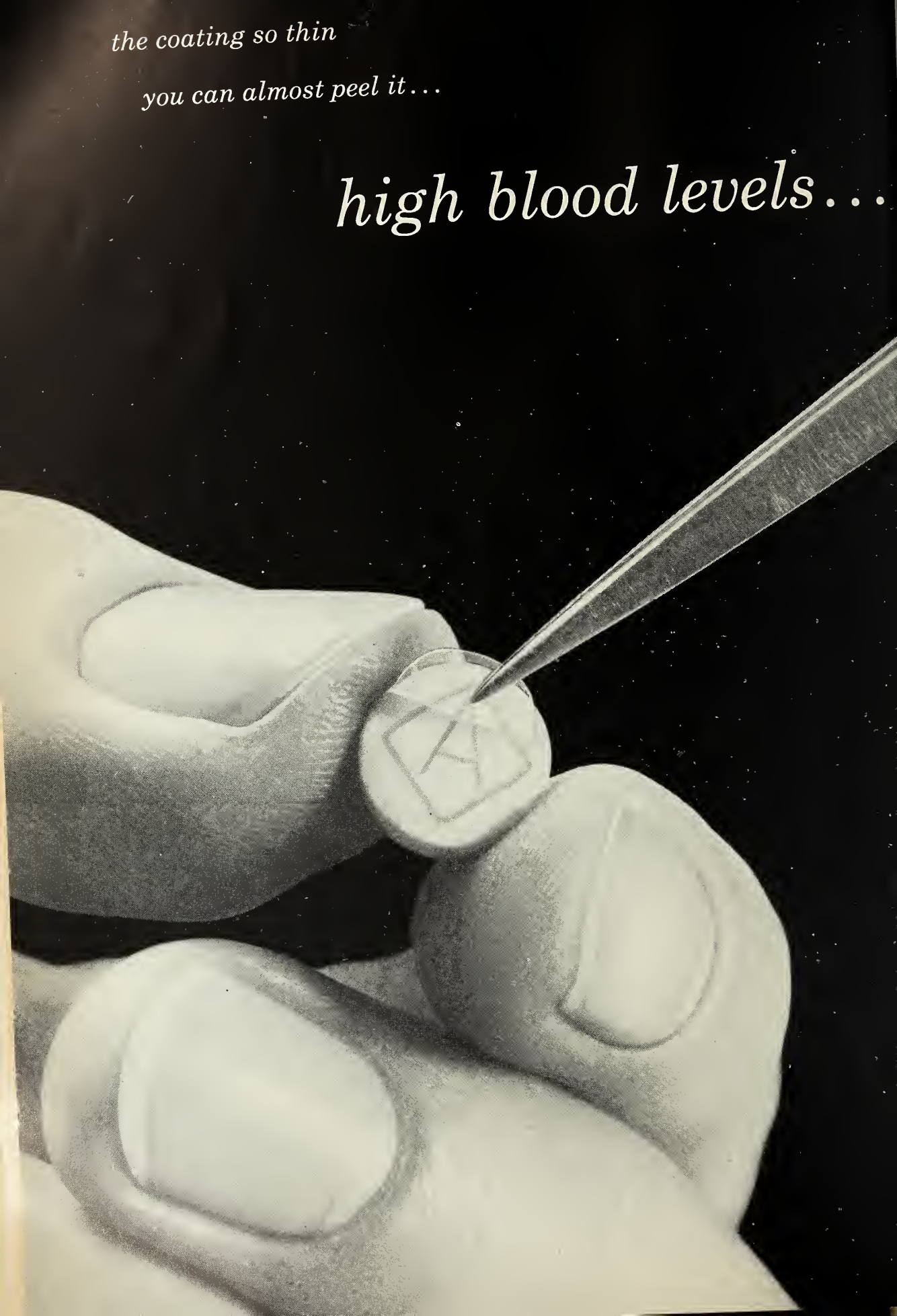
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Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
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The JOURNAL
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VOLUME 53 NOVEMBER, 1954 NUMBER 11

The Radiologist Looks at the Mass Chest X-ray Survey

By Paul O. Ragué, M.D., and
Henry J. Klos, M.D.
Benton Harbor, Michigan

WE DO not offer this paper as an important scientific contribution, nor do we believe it to be a significant statistical study. We had the privilege of participating in a small way in the May, 1953, Berrien County chest x-ray survey, and the following is rather a crystallization of some of our thoughts on the problems of mass screening in the light of that experience. The project was sponsored jointly by the Michigan Tuberculosis Association, Berrien County Health Service, and the Berrien County Chapter of the Cancer Society with assistance from a large corps of volunteer workers. The 70 mm. films were made by three commercial units, one portable and two in busses, engaged by the MTA. So far as we know this is the first combined tuberculosis and lung cancer survey in the state of Michigan. The public paid a nominal charge of fifty cents for a survey film, although many businesses and industries paid for their employes, and the schools, county, and MTA helped defray costs of surveying certain age categories of school children. A total of 40,669 x-rays was taken, representing 35.4 per cent of a probable total county population of 115,000. A total of 915 (2.2 per cent) abnormalities was reported by four film readers who did not check one another. Tbc cases or Tbc suspects numbered 493 (1.2 per cent), tumor suspects 134, cardiacs 144, and other 76.

Objectives

There can be little question of the value of or need to justify the mass survey as an instrument for case-finding in tuberculosis, thereby diminishing the danger to the general population of infection from unsuspected sources. The benefits are not measurable in concrete terms nor in material standards. There is saving to the community of public funds expended in the institutional care of the tuberculous patient and the support of the indigent family when the patient is the breadwinner, as well as of productive manpower and public physical well being. It is obvious that the primary objective of the mass survey is to cover as near to 100 per cent of the population as is humanly possible. A second and less often stressed objective should be the maximum utilization of information obtained for the benefit of the population surveyed.

Mechanisms

Methods of obtaining the first objective of maximum coverage are primarily education, promotion, and organization. The MTA and Cancer Society have access to publicity mediums and are experienced in their use in the early phase of the program. It is desirable to enlist the support or active participation of as many organizations as possible and practicable, not only to facilitate a contagion of interest to the grass roots level but also because each volunteer will feel some compulsion to see that all members of his family are surveyed. Although it is questionable whether an x-ray survey of a community for detection of malignant disease or cardiovascular abnormalities alone could be justified, there are definite advantages to the combined Tbc-cancer survey. The greatest benefit arises from the fact that a larger segment of the population will be surveyed, and

TABLE I. COMPARISON OF EFFICIENCY OF 1950 AND 1953 CHEST X-RAY SURVEYS IN BERRIEN COUNTY (POP. 115,000)

Total Number X-Rayed by Type of Location	1950	1953
Industrial		
Number of locations	41	38
Number X-rayed	7,046	12,003
School		
Number of locations	3	21
Number X-rayed	450	8,549
Public		
Number of locations (Some used more than once)	27	43
Number X-rayed	10,548	20,117
Total number X-rayed	18,044	40,669
Total number of communities served	17	25

the increase will be largely in that older age group not normally interested in Tbc detection. Widespread recent press interest in lung cancer will heighten that tendency. It is probable that the groups most accessible for survey, schools and industries, are least likely to be productive from the case-finding standpoint. While well over one-fifth (8,549) of all x-rays were taken at schools, the survey yielded only 72 Tbc suspects in those under the age of twenty as compared to 421 Tbc suspects in those age twenty and over. The age group below twenty obviously includes pre-school and school children x-rayed at public locations and post-school youths x-rayed at public and industrial locations. Nevertheless, it seems probable that the x-raying of school children would be one of the best methods of arousing family interest, and that as other members of the family are included in special industrial and business groups the likelihood increases that those at home will avail themselves of the opportunity to be x-rayed at the public locations. Figures 1 and 2 illustrate some interesting incidental findings among school children.

In a demonstration survey conducted in Berrien County by the MTA in October, 1950, only 18,044 x-rays were made. The more than 100 per cent increase to the 40,669 x-rayed in the May, 1953, survey (Table I) probably reflects the effect of a number of the above factors: educational benefit of previous surveys, participation of the Cancer Society, and more extensive school coverage with resultant increased family interest. The relative contribution of each of the factors would be difficult to determine. If a third survey is staged in 1955 as contemplated, it is conceivable that a majority of the population may be reached.

There is room for improvement in attaining the second objective: maximum utilization of the information obtained. Following the 1950 survey we had experienced some frustration in our radiologic practice when encountering obscure chest lesions in our routine work. It is often vital to know that such a lesion is new or old or that it is increasing or regressing, and it is little help when the patient states he had a survey film made a year or two ago which "showed something, but it didn't amount to anything" or even that it was normal. "Normal" may mean that the lesion was present but missed due to factors inherent in mass produced, single projection, small size films and reader fatigue or that the lesion was present and misinterpreted as an artefact or insignificant abnormality. It is equally baffling when the patient reports for further study of a suspected lesion and the large size films are found to be normal. It is a distinct advantage in such instances to have the small film readily available for review and comparison.

For these reasons we suggested during the planning phase of the 1953 survey that a file of all films, both normal and abnormal, be established and kept in the county, where the films would be readily and permanently available. This was done at the cost of considerable additional volunteer work. The Berrien County Health Service has charge of this file. From our point of view this has been an eminently satisfactory arrangement.

The prompt processing and reporting of the films should be the goal of all participating workers but is difficult to attain. At best the interval between the taking of the x-ray and the notification of the individual will seem unduly long to the public. A single unit if strategically located may take more than 1,000 x-rays a day on rolls of up to several hundred each. Facilities for developing, fixing, and drying long film rolls in large numbers will not be found in most Michigan counties, and as a consequence they must usually be sent elsewhere for processing. Upon their return (two weeks) they await a slack period in the interpreter's day, not only because he must carry on his own practice but also because hours of uninterrupted staring into an illuminated roll film viewer reduces both efficiency and accuracy. For the volunteer clerical help there remains the tedious task of scanning the individual data cards, which have accompanied the x-ray film from the unit through to the interpreter, and transferring

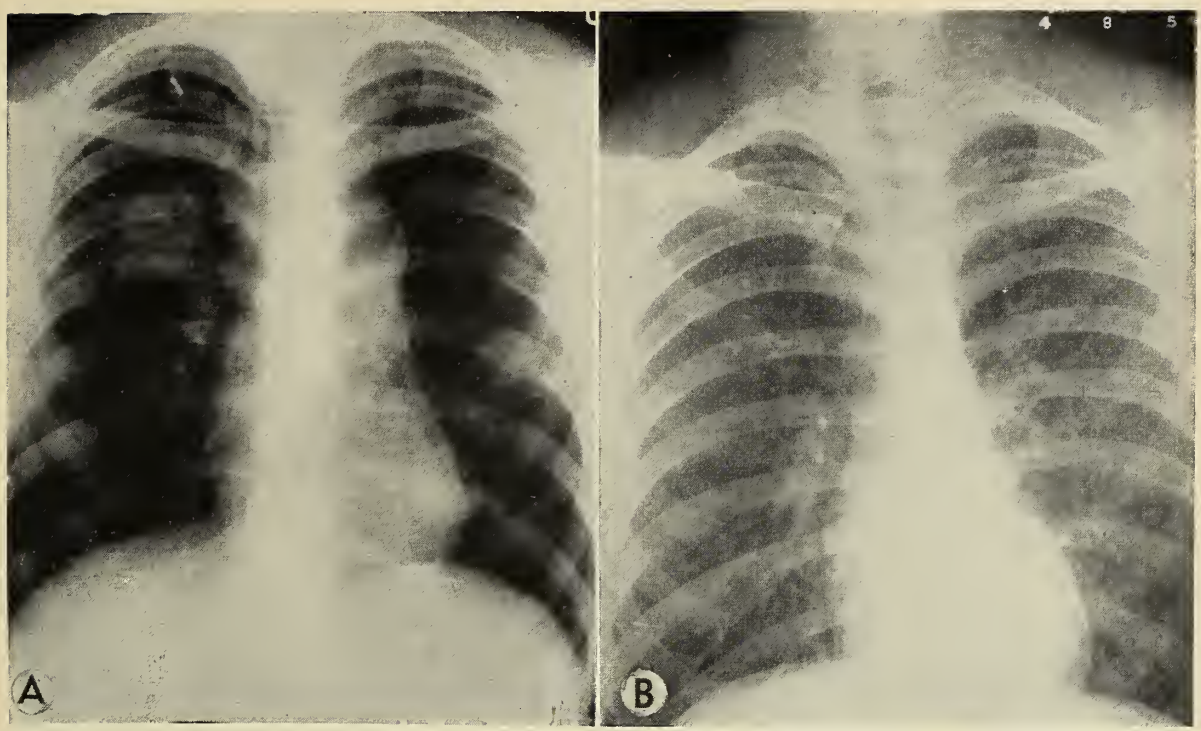


Fig. 1. (A) Survey film of 18-year-old white male showing mediastinal and bilateral parenchymal masses. Complete laboratory, roentgenologic, and clinical work-up, including bronchoscopy, yielded no positive diagnosis. A test dose of x-ray therapy to the mediastinum was given because roentgen and clinical pictures were suggestive of lymphoma. (B) Same patient two months after therapy. No recurrence one year after therapy.

pertinent information to other cards which will ultimately (six weeks if normal) be sent to the individual, physician, or agency concerned. Certainly routine channels can and should be jumped and a telephone or other special report rendered when a frankly active or open Tbc or obvious malignancy is encountered. It is desirable publicity to have a sympathetic press report such cases as are found very early in the survey with emphasis on the significance with respect to the protection of the rest of the family and community and the therapeutic advantage of treatment in the early stages of disease rather than on isolation.

A plan for promptly locating and fully evaluating every individual with any abnormality or suspected abnormality should be carefully formulated. This is usually no great problem in cases of suspected tuberculosis since the agencies concerned are backed by appropriate legislation and staffed with professional personnel experienced in tracing cases and suspects. The situation differs somewhat in the case of the tumor suspect since the public health implications are not as clear-cut and the personnel of cancer organizations is largely volunteer. Their past experience is primarily in the field of education, prevention, and financial

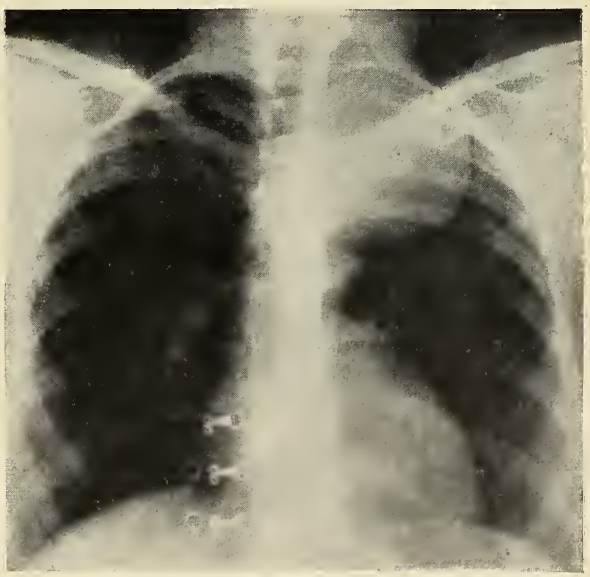


Fig. 2. Survey film of nineteen-year-old white female. Tumor resected. Ganglioneuroma.

or nursing assistance. It is debatable, and probably a matter best decided locally in consultation with the Medical Society, whether responsibility to the tumor suspect should continue beyond the sending of appropriate notification to the in-

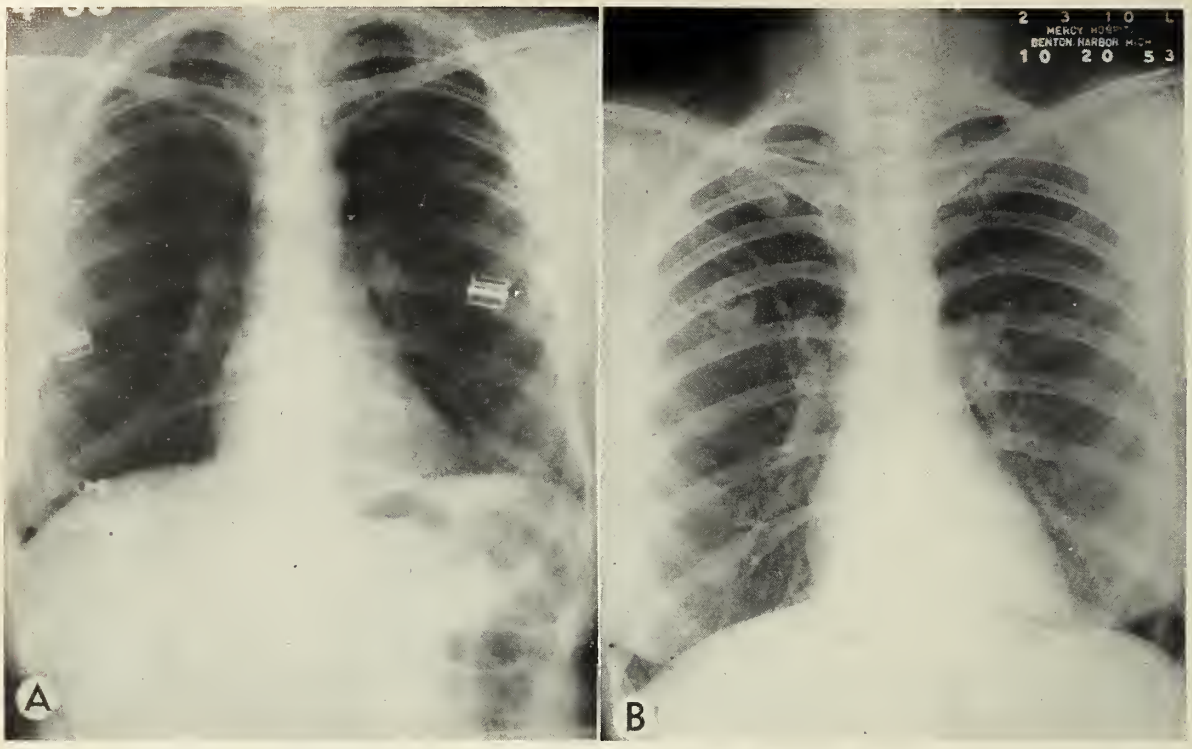


Fig. 3. (A) Normal survey film of thirty-six-year-old white female. (B) Same patient five months later. Routine chest study prior to elective surgery. Tuberculous cavity right upper lobe.

dividual and his physician. If the responsibility does cease with notification, as we are inclined to believe, much valuable statistical information on various aspects of lung cancer will unfortunately be lost. If anticipated, this difficulty might be largely obviated by a program of persistent, skillful, and sympathetic contact and inquiry by the Cancer Society as well as a plan for follow-up through the Medical Society.

In the event a suspected neoplasm is found to be a tuberculoma or a similar inflammatory residue, that individual's name ought to be transferred to the Tbc suspect file.

Where enormous cardiac enlargement is observed in a middle-aged or older individual it is doubtful that the report will convey any new information to the patient or his family physician or result in any great saving of life. A report of abnormal cardiac size or configuration in children or young individuals, however, may be a valuable service.

The Role of the Physician

The endorsement of the organized medical community will be sought at the beginning of the campaign and should be wholeheartedly given. Individually physicians are in a position to contribute materially to the success of a survey by personally evincing enthusiasm for it in their daily contacts and by participating in the planning and promotion when called upon. If they are aware of the delays and shortcomings of survey work they can also allay much misunderstanding and complaint at the source. As an extreme illustration of an entirely unanticipated and unfortunate sequel of misunderstood publicity we cite the pathetic elderly female who ignored a breast malignancy because "the x-ray was supposed to show cancer" and the survey film was normal.

The physician will realize that the single P. A. 70 mm. films made as rapidly as possible without disrobing the patients will have diagnostic limitations because of reduced size, technical shortcomings, lack of lateral projection or stereo mate, and artefacts introduced by clothing. Usually, but not always, such artefacts are fairly readily identified by composition or configuration as ornament, content of pockets, or feminine prosthesis. There is no alternative but to report every doubtful finding as *suspect* under one of the categories for final evaluation on large films even though the interpreter believes it to be probably insignificant.

TABLE II. ABNORMAL FINDINGS (SURVEY DIAGNOSIS ONLY) REPORTED IN 1953 BERRIEN COUNTY SURVEY

	Unsatisfactory films	68	
	Active	?Active	Inactive
Primary Tbc	4	4	2
Minimal Tbc	9	96	62
Mod. Advanced	16	32	26
Far Advanced	5	6	1
	34	138	91
Total classified Tbc		263	
Unclassified		43	
Tbc suspects		187	
Total Tbc		493	
Total neoplasm		134	
Total cardiac		144	
Total "other pathology"		76	
Total Abnormal		915	

Despite the amazing readability and good technical quality of the average survey film, it remains a good screening instrument but a crude diagnostic medium. Certainly one should not attempt to differentiate inactive from active Tbc except in the presence of frank cavitation. The physician should be as cognizant of these limitations as the interpreter and should realize that actual active Tbc cases and malignancies will be but a small per cent of total suspects in those categories (Table II). Figures for incidence of active Tbc among suspects are not offered since this oftentimes will be conclusively determined only by serial observation over a long period of time. Contrary to what had been anticipated the vast majority of Tbc cases and suspects reported from the 1953 survey were new to the files of the Berrien County Health Service. Herein lies the chief service of the program.

No group follow-up was made with respect to cardiac abnormalities and "other pathology" (usually anomalies).

Follow-up on tumor suspects has been exceedingly difficult for reasons previously mentioned. Fortunately for the community the yield of proved malignancies represents less than 6 per cent of the 144 suspects and 0.2 per cent of all persons surveyed.

Proved carcinoma of the lung	4
Died, presumably of carcinoma of the lung	1
"Cervical malignancy" not reported in greater detail	1
Lymphoma (Figure 1)	1
Ganglioneuroma, resected, living (Figure 2)	1
Total tumor	8

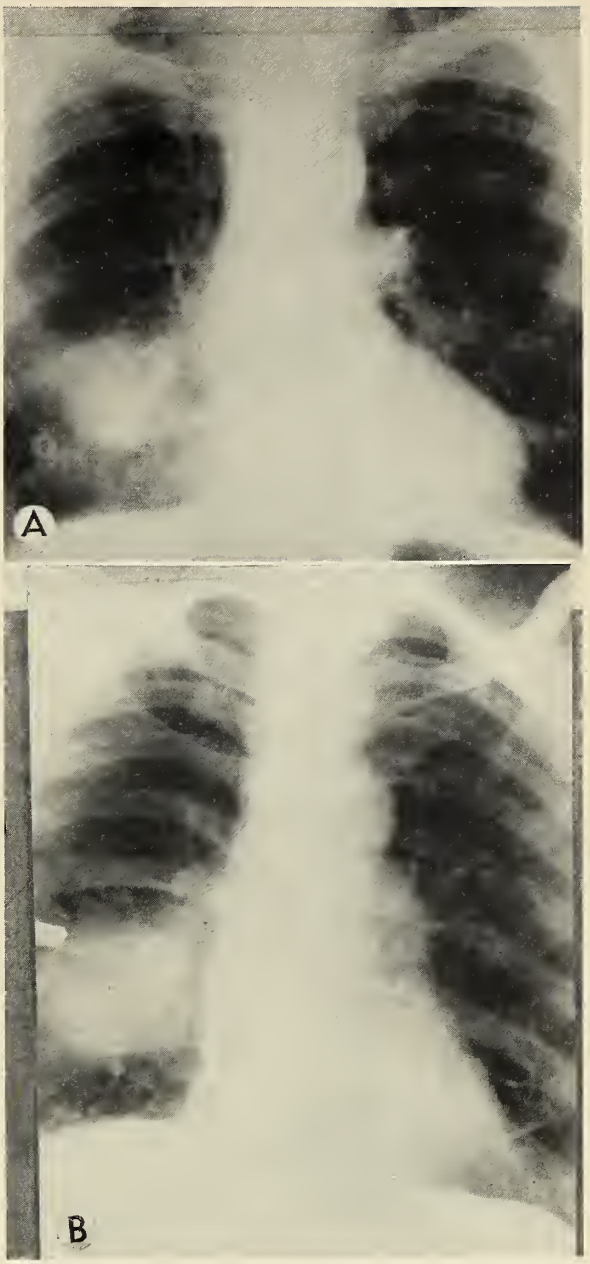


Fig. 4. Survey film of seventy-three-year-old white male. Mass proved to be carcinoma of the right lung but inoperable. Died within one year. (B) Survey film of seventy-eight-year-old white male. Inoperable. Died within one year.

The large number of *suspects* remaining includes (roughly in order of their frequency as determined by final evaluation) tuberculomas or other discrete inflammatory residues, diffuse pulmonary inflammatory residues and pleural changes, aneurysm and similar abnormal cardiovascular configurations, substernal thyroids, bronchiectasis and other diffuse inflammatory processes, Boeck's

sarcoid, tumor of the chest wall, and also one still undiagnosed pulmonary lesion in a patient who refused further study. Presumably similar non-malignant changes were encountered on follow-ups done elsewhere but simply reported "negative." It is our impression that we would be much more likely to receive complete information on proved malignancies. Although the collective follow-up was quite unsatisfactory in the statistical sense, the individual follow-up was undoubtedly adequate for the exclusion of malignancy to the satisfaction of the patient and his physician in the majority of cases.

At the risk of seeming naive, we caution the physician to be aware of the patient's tendency to feel secure indefinitely on the strength of a normal survey report nor should the physician fall into this trap himself in his dealings with the patient. Figure 3 illustrates a case of tuberculosis apparent five months after negative survey findings. Let the physician ignore the survey film without discrediting it if he entertains the least suspicion as to the status of the patient's lungs.

Although only one patient is still alive after pneumonectomy and may have been spared death from bronchogenic carcinoma as a result of this survey, all five malignancies discovered in this program were too far advanced to be favorable candidates for resection (Figure 4). No valid conclusions can be drawn from the experience with so small a number, and we see no reason to anticipate that the findings need be equally discouraging in the contemplated 1955 survey.

Summary

The mass chest x-ray survey is an invaluable instrument for the detection of tuberculosis carriers and protection of the community. Because it is also a potentially excellent means of finding early lung cancer, benign tumors, and correctable cardiac abnormalities, participation of cancer societies and similar agencies is desirable and will also increase the effectiveness of the program. It is worthy of strong collective and individual support of all physicians.

Th value of the survey will be enhanced and more lasting in nature if the films can eventually be placed in a readily accessible central file.

Practitioners should appreciate that the mass x-ray survey is a screening method and as such has diagnostic limitations calling for their energetic follow-up and comprehensive evaluation of all suspected abnormalities.

The radiologist interested in participating in some part of the mass survey will find it an interesting and informative experience.

A ROUNDUP OF PR ADVANCES

(Continued from Page 1204)

PR Institute in Chicago last September, which was planned primarily for executive and PR personnel of state and county societies, and for PR committee chairmen and Auxiliary leaders, and drew almost 300 participants. In addition to MSMS PR staff members, Michigan representatives at the Institute included: H. C. Bodmer, M.D., Kalamazoo; R. H. Fraser, M.D., Battle Creek; Mrs. A. F. Milford, Ypsilanti, President of the Woman's Auxiliary; John W. Castellucci, Detroit, Assistant Director of Michigan Medical Service; William F. Grimshaw, Detroit, PR Director for the Michigan Epilepsy Center, and Mrs. Elizabeth Peck, Detroit, at that time President of the Michigan State Medical Assistants Society.

Emotional Problems of Tuberculosis Hospital Patients

By H. D. Ireland, M.D., F.A.C.P.
Grand Rapids, Michigan

THE COMPLETE management of tuberculosis frequently means prolonged diagnostic procedures, persuading the patient to accept the diagnosis, convincing him of the need for isolation and hospitalization, prolonged treatment, rehabilitation and subsequent follow-up. In the course of this management, the emotional factor is important. Occasionally, it reaches a degree of first importance. I sometimes suspect, however, that in the current popularity of things psychological, it is overemphasized. The idea has become planted in the public mind that discontentment and nervous tension *per se* have a deleterious effect upon the course of tuberculosis. Patients and their families commonly use the idea that they would be unhappy, or nervous as an excuse for avoiding the cold, hard realities of a serious disease and its need for treatment. While there is undoubtedly the indirect influence of interference with sleep, rest, relaxation, appetite, perseverance and possibly hormonal balance, phthisologists have repeatedly observed patients in the extremes of emotional conflict resolve their tuberculous infection with remarkable facility.

Before discussing the emotional problems of tuberculosis patients, we should first consider the material with which we are dealing. We are dealing with the general run of patients, which is to say, the general population modified to some degree by the fact that the incidence of clinical tuberculosis is high in the lower economic groups, males past middle age, and possibly in the antisocial, alcoholic and those otherwise psychologically maladjusted. Just as there is no clear-cut, dividing line between the sane and insane; between the neurotic and those without neuroses, it is not possible to state definitely the percentage of the general population that may be considered emotionally maladjusted. There are some statistics that give a rough indication.

From the beginning of hostilities in Korea through 1951, the National Selective service system rejected 37.4 per cent of draft registrants as unfit for military duty.[1] Twelve and one-half per cent of these, or approximately 5 per cent of all registrants, were rejected for mental or moral reasons. Michigan State College published in 1950, a study of the health needs and medical care in Michigan.[3] Using the random sample method, several hundred people throughout Michigan were queried. Included in the survey were questions concerning their feeling toward doctors and hospitals. Seven and eight/tenths per cent of the people were found dissatisfied with the way their family physicians (M.D.'s and osteopaths) treated them. Twenty-four per cent expressed dissatisfaction with the treatment they or members of their families received in general hospitals. It is interesting to note that throughout the U. S. the per cent of patients leaving tuberculosis hospitals against medical advice averages 22 per cent. The record book of the National Retail Dry Goods Association[6] give composite figures on the per cent of sales returned in over 200 department stores. Those stores with a million dollars' gross sales per year had 7.5 per cent returned. Those with gross sales of $50 million per year had 11 per cent returned, presumably because of dissatisfaction with the goods the customer himself selected. The Vocational Guidance Journal, *Occupation*[7] summarizes 191 statistical studies over the past seventeen years of worker satisfaction. The percentage of dissatisfied workers range from 1 per cent to 92 per cent. The mean is 19 per cent. These studies include all types of occupations—unskilled, skilled and professional. R. N. McMurray,[2] after examining a large number of employes in industry, found 1 per cent to be paranoid, 5 per cent to be chronic malcontented. He estimated that up to 20 per cent of all employed persons suffered from some form of mental illness (major or minor emotional maladjustment.) It seems reasonable to estimate that somewhere in the neighborhood of 10 per cent to 20 per cent of our people are unhappy, dissatisfied and maladjusted in their usual life situations. Dr. Eric Whitkow[8] of England made an intensive and detailed psychiatric examination of 300 tuberculosis hospital patients. He classified these patients' premorbid personalities as: (1) rebellious, 12 per cent; (2) conflict harassed, 13 per cent; (3) overtly insecure, 39 per cent; and (4) unclassifiable, 7 per cent. This group included mental defectives, schizoprhrenia, schizoid personality, conversion hysteria and patients whose illness was of too long

standing to permit reconstruction of their previous personalities.

The factors in tuberculosis patients and in tuberculosis hospitals that produce psychological difficulties may be grouped as follows:

1. Patient's Preconceived Ideas. Many individuals have always thought of tuberculosis as an unclean, disgusting, incurable illness that affects only other people and weaklings. Many are also accustomed to thinking of it as a disease that carries a social stigma and family taint. The patient himself will learn better after a while but he often knows that his family and friends have not learned. He then suffers embarrassment, a blow to his ego and a loss of respect.

2. Reaction to Diagnosis. Patient's emotional reactions to the diagnosis vary greatly. They can be grouped under three main headings: shock, incredibility and little concern. Dr. Whitkow found 59 per cent of the patients greatly shocked when first told of the diagnosis. Many of these expressed great fear or resentment. Eight per cent were skeptical or refused to accept it entirely. Thirty-five per cent expressed little concern.

Putting the diagnosis to the patient is a difficult problem. Physicians may err in three ways. By putting the diagnosis bluntly and by emphasizing the seriousness of the condition without preparation, they may upset the patient unnecessarily. By putting it too gently, the patient may be unduly optimistic, decline to take it seriously and resist subsequent recommendation for treatment. By putting the diagnosis in technical language the patient may become confused or unduly frightened.

Length of Treatment and Economic Circumstances

It is also necessary to guard against undue optimism about the speed of recovery. Patients become extremely resentful during the course of treatment when they have been told in the beginning that treatment would require only a few weeks or months. It is usually preferable to error on the side of overstating the estimate of time while emphasizing that no definite time can be set for the completion of his cure.

Vocation and Avocation

Patients with advanced tuberculosis infection can rarely return to occupations or hobbies that involved high degrees of physical exertion. Frequently, these individuals will be forced to change not only the occupation but recreational interests as well. They will then find themselves left out of the "old crowd" and consequently under the necessity of acquiring new friends, plus loss of economic security, lower standard of living and shattered hopes and dreams.

Domestic Upheaval

An especially disturbing point to the tuberculosis hospital patient is the domestic upheaval produced by the necessity of prolonged hospitalization of a responsible member of the family. Mothers are often placed in a difficult position with the necessity of placing the younger children with reluctant relatives or in foster homes. The lack of parental guidance and control becomes a severe problem in the case of the older.

Knowledge of, or uncertainty of, the faithfulness of the spouse is common among those who are hospitalized for a long period of time. It is almost commonplace to find the patient upset because a friend has brought in the information that the spouse is "stepping out," or he will know such is true in the case of the husband or wife of the patient in the next room and wonders about his own. Many patients leave tuberculosis hospitals against medical advice for these reasons. Divorce of those confined to chronic disease hospitals is especially common. Somewhat less serious but disturbing, is the uncertainty of the fiancee. It does not require a great imagination to understand the mental turmoil of an individual who is chronically ill and confined to bed knowing that the wife, husband or fiancee is becoming interested elsewhere and will soon make other attachments.

Feelings of Guilt

Patients are often aware for some months or years prior to hospitalization that they have significant tuberculous lesions, but have succeeded in ignoring the diagnosis until symptoms developed of such degree that hospitalization was necessitated. They are quite aware of having exposed their families and associates unnecessarily to the infection. Likewise, patients with family histories of tuberculosis frequently ignore obvious symptoms as long as possible, fearing the results of examination. These add years to their period of hospitalization and treatment with its attendant economic and family hardship. Though not often freely expressed, these patients do suffer a real sense of guilt.

Toxemia

Tuberculosis patients with far advanced disease or with an acute exudative form of the infection

have some degree of toxemia, objectively manifested by fatigue, anorexia, fever, chills, night sweats. Psychologically, it is frequently noticeable as a tendency to hysteria, restlessness, irritability, excitement, crying or inability to concentrate. Occasionally, patients with extremely far advanced infection, associated emphysema, pulmonary fibrosis or following extensive collapse or resectional procedures suffer some degree of anorexia. Prolonged low grade anorexia is observable as ease of fatigue, irritability and poor concentration.

Sex

The natural instincts are apparently increased in the tuberculosis patient. There has been much speculation in regard to the effect of tubercle bacilli toxins on sexual drive. Since sex urges are not susceptible to measurement, the matter must be left in the realm of speculation. It would appear, however, that prolonged inactivity of bed rest without the opportunity for release of physical energy, increased introspection, erotic thinking, absence of the usual social contacts and decreased opportunity for sublimation is adequate explanation for the increased interest in sex. In any case, a great many patients find themselves under severe tension and it is the unadmitted reason for many patient refusals to remain in sanatoria.

Dependency

The majority of patients find the prolonged dependency upon their family, friends, and hospital personnel extremely frustrating and depressing. Friends are likely to disappear one by one. Families find it difficult to maintain interest in frequent visits. Hospital personnel is usually a compromise between the desirable and obtainable, often with emphasis on the latter. I fear the estimated 10 per cent to 20 per cent of maladjusted and chronic malcontent among industrial workers applies equally well to hospital employes. These, over the period of months and years that the tuberculosis patient must be hospitalized, subject him to inestimable small humiliations, aggravations and irritation. The doses are cumulative.

Fish Wife Medicine

People are universally interested in medical subjects. It is unlikely that any one topic, not excluding the weather, is the subject of more conversation. Patients receive a constant barrage of medical opinions and advice from family, visitors and fellow patients. Unskilled and semi-skilled hospital personnel are not immune to the habit. It is not surprising that sanatorium medical and nursing staffs often fail to keep the necessary information clear in the patient's mind, especially so since they struggle against his wishful thinking, natural desires and the confidence of ignorance. It is a constant interference with treatment programs. If the patient does not succumb to all the talk of quick and easy cures, he is harrassed with innumerable doubts and uncertainties.

Many sanatoria run on a low budget and have too high a percentage of employes that are not wanted elsewhere. An incompetent employe is not an economy. Aside from his poor work, such an employe generally needs to nourish his ego or to give vent to his frustrations. The patient is the victim. It is well to recall that the average patient's stay in a general hospital is 6.6 days. The patient can tolerate a good deal for that length of time. But month after month in a tuberculosis hospital is too long to endure incompetence, rudeness and "fish-wife" medicine. If those employes could be eliminated and we could apply the art of medicine and nursing we have talked about since entering the professional schools, the patients would have more confidence and give more co-operation. There would be fewer irregular discharges.

These points add up to four sources of fear, three blows to the patient's ego, two reasons for sense of guilt, five elements of uncertainty, two reasons for resentment, at least one physical factor and sexual frustration imposed upon an individual who over a long period of time has no outlet for physical energy and too much time to think. Fortunately, not all of these factors are operating at the same time, otherwise, no patient would emerge from a period of tuberculosis treatment without deep psychiatric scars. However, if he originally had any considerable tendency to neuroses or psychoses, it is likely to be manifest at this time.

There are compensations. Those who are morally and psychologically strong enough to adopt a philosophical attitude will find the period of inactivity allows them an opportunity to develop hobbies and lines of study in which they have always been interested but never had time to undertake. For those who wish to make the effort, there is every opportunity to develop interesting

avocations of scholarship and handicraft that will be of value for the remainder of their lives. It is possible for a patient to come out of a tuberculosis hospital with a personality in education greatly improved. Many acquire a new and far more realistic sense of values. There is also an escape from the competition, pressure and responsibility of every-day living that is a profitable respite for many harrassed individuals.

Patient's financial and domestic worries can be in part alleviated by an adequate social service department. Much uncertainty about the future can be eliminated by social service and rehabilitation. Some fears and annoyances can be disposed of by proper patient and family education. Most tuberculosis hospitals have good service in these fields. Others would have if they could afford them.

Undoubtedly, a great deal could be accomplished by adding a full-time psychiatrist to the hospital staff. However, we are probably too glib in referring patients with minor neuroses and maladjustments; too often it is in the nature of buck-passing.[4,5] The regular ward physician is in a position to observe the patient and his reactions to the disease and abnormal situation. Sympathetic understanding, and firmness when necessary, may be a better solution to a given problem than detailed psychiatric examination. The question should be raised as to whether it is justifiable to undertake a prolonged and expensive course of analysis and reconditioning in these minor mental and emotional maladjustments. It is questionable whether such procedure will accomplish a lasting solution or merely fan the flames. Too much psychiatric conversation with many of these patients may increase their introspection and in doing so accomplish more harm than good.

Finally, let us be modest enough to recognize the obvious. Namely, that the human race being what it is, the best of medical, nursing care, social service and psychiatric consultation will not succeed in keeping all patients happy and free from conflict. There will still remain a small percentage, vociferously maladjusted and dissatisfied.

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EARLY CONSERVATIVE THERAPY CALLED BEST METHOD TO ARREST ARTHRITIS

Early and intensive use of a course of conservative treatment is "more likely to achieve a true arrest of rheumatoid arthritis than any other measure of therapy," according to Dr. Norman O. Rothermich of the Department of Clinical Medicine, Ohio State University College of Medicine.

Writing in *American Practitioner and Digest of Treatment* (5:647, 1954), Dr. Rothermich emphasizes that no measures, or drugs, now available can cure the disease. In line with a program of conservative treatment, he says that "most cases are best treated with simple aspirin, and I see no advantage to using other more complex salicylate combinations which are only more expensive."

The author further notes that aspirin, and other salicylates, have some beneficial action in "all rheumatic diseases over and above their analgesic effect."

Discussing other forms of drug therapy, he suggests use of steroids or gold only when it has been established that conservative measures have failed to manage the condition.

First step in treatment should be psychotherapy, with the physician acquainting the patient with the nature of the disease. Much progress can be made if the patient is given an insight into the pattern of his personality "which is playing such a large role in his disease."

Bed rest is cited as vital in managing rheumatoid arthritis, with the author calling ten hours daily the minimum. Other important measures are massage, exercise and the application of generalized heat to the whole body, in the form of hot baths.

Isonicotinic Acid Derivatives in the Treatment of Tuberculosis

By Winthrop N. Davey, M.D.
Ann Arbor, Michigan

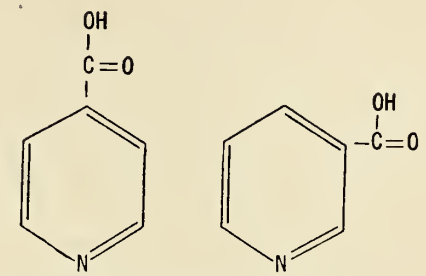
TUBERCULOUS disease continues to present the most challenging medical problem in the world today. In excess of five million persons succumb annually to the ravages of the tubercle bacillus. In America we are fortunate that great strides have been taken in the control and management of tuberculosis, though it continues to be the most common cause of death between the ages of 15 and 35 years and, paradoxically, is becoming a disease of older persons, particularly males in the sixth and seventh decades of life.

The essential problem of tuberculous disease, however, is not that of its management and treatment, but that of its early diagnosis; at a time when the disease is incipient and minimal in extent and most amenable to the current forms of specific therapy. As long as the majority of patients with the diagnosis of tuberculosis have advanced stages of the disease, the problem of effective treatment will continue difficult and often impossible to solve.

The chemical approach to the control of tuberculosis has resulted in the greatest advances toward the goal of definitive therapy. The antibiotics, of which streptomycin is the best known antituberculous agent, are produced by living organisms. The agents, as para-aminosalicylic acid and the isonicotinic acid derivatives, are synthesized substances demonstrated as possessing antituberculous qualities. Both the antibiotics and synthetics have become increasingly important with the discovery of their tuberculostatic activity.

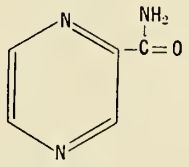
Tuberculostatic antibiotics are limited practically to streptomycin, dihydrostreptomycin and viomycin. Neomycin and terramycin, though to some extent tuberculostatic, are either too toxic when administered parenterally, or relatively ineffective, respectively.

Tuberculostatic synthetics may be divided into the sulfones, aminohydroxybenzoic acids, thiosemicarbasones and the derivatives of the pyridine carboxylic acids (nicotinic and isonicotinic acids)

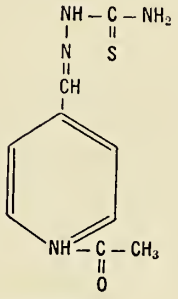


Isonicotinic Acid Nicotinic Acid

Fig. 1.



Pyrazinamide



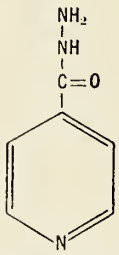
Amithiozone

Fig. 2.

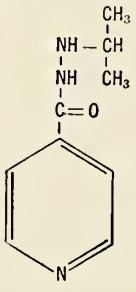
(Fig. 1). The sulfones, though possessing definite tuberculostatic activity, are relatively toxic when employed for the long periods of time necessary in the treatment of tuberculous disease. Para-aminosalicylic acid (PAS), one of the aminohydroxybenzoic acids, though only moderately tuberculostatic *in vivo* has found a very useful place in concurrent administration with streptomycin. The thiosemicarbasones, including amithiozone (Tibione; TB 1-689) (Fig. 2), though once employed extensively on continental Europe, probably as a result of the paucity of available streptomycin, are relatively toxic to the liver, kidneys and hematopoietic system. The pyridine

From the Department of Internal Medicine, University of Michigan Hospital, Ann Arbor, Michigan.
Presented at the Seventh Annual Michigan Clinical Institute, Detroit, Michigan, March 13, 1953.

carboxylic acid derivatives, including isonicotinic acid hydrazide (isoniazid) and its isopropyl derivative (iproniazid), are the topic of this discussion.



Isonicotinic Acid Hydrazide



1—Isonicotinyl — 2—Isopropylhydrazine

Fig. 3.

As outlined by Florey[5] the characteristics of an antituberculous agent should include: (1) small molecular size with concomitant easy diffusibility to the site of infection, (2) bactericidal rather than bacteriostatic activity in low concentrations, (3) a slow rate of production of resistant strains, and (4) a relative atoxicity to the host in general and to the cells of the kidney, liver and other organs where the drug might be concentrated.

Because the treatment of tuberculous disease with antimicrobials remains difficult and because none of the agents employed meets the requirements of an ideal antituberculous drug, as listed above, a search has continued for more and better antituberculous agents.

The tuberculostatic activity of nicotinamide has been known since 1945,[7] when it was also found by Chorine[2] that nicotinic acid, in spite of its vitamin activity, was not tuberculostatic; thus conclusively demonstrating no relation between the two activities. Subsequent to 1948, when McKenzie, et al[10] and Kushner, et al[8] again showed that nicotinamide was a tuberculostat, Fox[6] investigated the derivatives of pyridine carboxylic acid closely related to nicotinamide in the hope of disclosing compounds of greater activity against the tubercle bacillus. This type of investigation also proceeded in other laboratories in Europe and America.

Pyrazinamide (Fig. 2), a derivative of nicotinic acid, was proclaimed in 1952[9] to be a tuberculostat and, though found to be more active against tubercle bacilli *in vivo* than PAS, there is indication that this agent, when employed alone, will be relatively ineffective, for strains of tubercle bacilli resistant to it emerge rapidly.

The two isonicotinic acid derivatives, isoniazid and iproniazid (Fig. 3), were prepared in early 1951 and clinical trials were started later that year. The press releases of February 21, 1952, gave the first hint that new, very active tuberculostatic agents had been discovered. Subsequent to March, 1952, these drugs have been employed extensively and studied intensively. Though they are very potent antituberculous agents, their precise place in the treatment of tuberculous disease remains to be established.

Both substances are small in molecular weight and readily soluble in water. Their antibacterial spectrum is very narrow and is limited essentially to *Mycobacteria*. Though effective when given parenterally, both agents, when given orally, are readily absorbed from the gastrointestinal tract.[14] Figure 4 shows the approximate concentrations in mcg. per ml. of plasma at 3, 6, 12 and 24 hours following a single 100 mgm. oral dose of isoniazid. The peak level is less than 5 mcg. per ml. of plasma. *In vitro* activity against tubercle bacilli is marked, most organisms being rendered static in concentrations of 0.1 mcg. per ml. of medium.

Certain toxic effects result from the administration of these drugs in a dosage of 3 to 5 mgm. per kg. per day (150 to 300 mgm. per day). Figure 5 summarizes the more common manifestations of toxicity. Iproniazid is without question a more toxic agent and there is no indication that it is superior to isoniazid in therapeutic effectiveness. Of greatest concern have been the few patients developing manifest psychoses while receiving these agents. Few such instances have occurred during treatment with isoniazid. The concurrent administration of phenobarbital has been found[12] to reduce some of such reactions to these agents. Withdrawal symptoms, usually of a minor nature, have been described.[16]

The early reports by Robitzek, et al[13] and Selikoff, et al[15] indicated the tuberculostatic effect

of these agents in clinical use. Since that time many patients have received isoniazid and iproniazid with continuing evidence of their great value in treating tuberculosis. There is increasing evidence that isoniazid, which is seemingly less toxic and is more widely employed than iproniazid, is as effective or more effective than streptomycin. As might be expected, isoniazid, if employed as the sole antituberculous agent, results in the rather rapid emergence of strains of tubercle bacilli resistant to the agent, approaching an incidence of some 50 per cent within 120 days of treatment.[3] This rapid emergence can be lessened, at least to some extent, by the concurrent administration of streptomycin, PAS or both drugs.[4] Even then resistant organisms may appear. The continuing controlled study of the use of streptomycin and PAS, isoniazid alone and isoniazid in combination with streptomycin, sponsored by the United States Public Health Service,[11] indicates that those patients receiving streptomycin and isoniazid in combination maintained, at the end of 40 weeks of therapy, a small but consistent advantage on the basis of roentgenographic, clinical, and laboratory findings, as compared with those patients receiving streptomycin and PAS or isoniazid alone.

Until the precise place of isoniazid in our armamentarium against tuberculosis has been established, the basic antituberculous regimen continues to be the prolonged use of combined intermittent streptomycin and continuous PAS therapy. It is quite probable that isoniazid in combination with other antituberculous agents will become a most valuable drug in treating tuberculosis and the regimens of choice may well include this agent.

Sanatorial care, including general bodily rest, continues to be the basic form of management of tuberculous disease and particularly of pulmonary tuberculosis. Such bodily rest varies widely in degree depending upon the geographical location of the sanatorium and the training of the physicians. There is not evidence, at the present time, that the use of antituberculous drugs can substitute satisfactorily for the long-established programs of sanatorial management. The lack of such evidence renders it mandatory that tuberculous patients receiving antimicrobial agents for the control of their disease be treated on an in-patient basis, though, of course, with prolonged treatment the latter portion of the course of drug therapy may be continued on an out-patient basis.

Thus the advent of effective antimicrobial agents for the control of tuberculous disease has led not to a lessened demand for in-patient sanatorial care, but rather, with additional efforts being expended in the detection of new cases of tuberculosis and the reduction in morbidity and mortality of those under treatment, to increased demands for more bed space in our sanatoria.

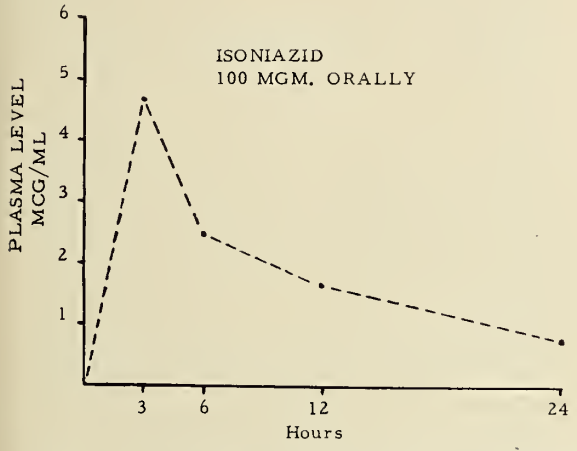


Fig. 4. The peak plasma level of isoniazid following an oral dose of 100 mgm. occurs at 3 hours and is slightly less than 5 mcg./ml.

TOXICITY

	INAH	IPNH
NEUROMUSCULAR HYPERIRRITABILITY	+	++++
PSYCHOSIS	+	++
URINARY HESITANCY	++	++
OBSTIPATION	+	++
WITHDRAWAL	0	+++
OTHER		
DRUG FEVER		
HEMOLYTIC ANEMIA		
SKIN RASH		
GRANULOCYTOPENIA		
EOSINOPHILIA		
ALBUMINURIA		

Fig. 5. Toxic reactions from iproniazid (IPNH) are more frequent and severe than those from isoniazid (INAH).

Summary

Tuberculous disease continues to present a most challenging problem to the medical profession. The problem of establishing the diagnosis of tuber-

culosis early in the course of the disease is of paramount importance.

Though the prolonged administration of combined intermittent streptomycin and continuous PAS has been a very valuable form of antituberculous therapy, there has been continuing hope that other effective antimicrobials would be discovered. The advent of the use of derivatives of isonicotinic acid in 1951 and their continuing use over the ensuing two years have indicated that these chemicals are potent antituberculous agents when employed alone and doubtless will prove even more valuable when used in combination with other tuberculostatic agents.

These drugs possess certain toxic potentialities which must be recognized. Their use alone for the treatment of tuberculosis seems unjustified. The treatment of choice continues to be streptomycin and PAS.

At the present time the use of antituberculous drugs in lieu of sanatorial care is contraindicated and the advent of additional tuberculostatic agents will not necessarily change this. Truly effective tuberculicidal drugs, if and when discovered, may possibly substitute for other general measures of management now most satisfactorily effected under a sanatorium regimen.

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HEALTH PROBLEMS AND ECONOMIC STANDARDS

Various health problems, which seem unrelated, actually are closely related. If the farmers in an area are all sick with malaria at harvest time, famine results. The lowered resistance of the starving population paves the way for more rapid spread of tuberculosis. Both malaria and tuberculosis result in lowered economic standards. Substandard housing and overcrowding follow and in turn contribute further to the development of tuberculosis. Extensive dental caries will result in malnutrition, which in turn may produce greater susceptibility to tuberculosis . . . the substandard living conditions resulting in part from such diseases cause discontent, frustration, and desperation—fertile soil for the growth of communism.—James E. Perkins, M.D., *NTA Bulletin*, Sept., 1954.

The Role of Physical Medicine in the Tuberculous Thoracic Surgical Patient

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PHYSICAL treatment has become an integrated and important part of the total care of the tuberculosis preoperative and postoperative thoracic patients at Fitzsimons Army Hospital. This plan of co-ordinated treatment has been evolved through the planning and co-operation of the medical, surgical, and physical medicine services, and has been in effect, with modifications, for the past eight years.

Pre-operative Considerations

The patient who is scheduled for surgery usually spends five to ten days on the ward before undergoing his initial procedure. It is during this time that all pertinent data, including the pre-operative laboratory work, is completed and assembled, and the pre-operative orientation is provided. The pre-operative evaluation and instruction by the Physical Medicine Service is a very important part of this orientation. Under ideal circumstances the patient is evaluated by the physiatrist and instructed by the physical therapist several days prior to his surgery. At that time it is plausible and practical to develop an understanding with the patient of what he can do preoperative and postoperatively for optimal functional results. It is advantageous to take note of existing limitations and deformities. The patient receives his initial instructions concerning the best post-operative position in bed, the principles of good body mechanics, and the shoulder-mobilizing exercises to be performed at a later date. Finally, at this time the patient can be duly impressed with the fact that the physiatrist and physical therapist can instruct, but that he himself must follow the instructions to derive any benefit. In the physical medicine management of these patients we are concerned primarily with preventing deformity, but where deformity is present, the same spirit of patient co-operation must be established.

The tuberculous surgical case has (1) a debilitating disease, (2) a lowered vital capacity and (3) a surgically altered body. These very factors define the needs, as well as the physical limitations, of the patient. Their co-existence, at odds with each other, requires careful consideration and immediate management to assure optimal function in the months and years far removed from the time of surgery. The physical therapy program entails the minimal localized activity which will accomplish the desired results at the appropriate time. In many cases, particularly in those who have had prolonged hospitalization, residual muscular losses and weaknesses are frequently only too obvious when the patient returns to his medical ward to presume that maximal benefit from physical treatment has been attained while on the surgical ward. The limiting factor in treatment, as always, is the patient's disease. Residual weaknesses suggest the need for further physical rehabilitation later when the patient's treatment program permits increasing activity.

Operative Alterations

With thoracoplasty a number of anatomical and functional patterns are altered.

1. The balance of the neck is disturbed, allowing a lateral deviation of the head and neck toward the unoperated side. The rigid points of attachment of the scaleni are separated from the first and second ribs.

2. The chest is deformed by the resection of the ribs.

3. A potential scoliosis is initiated at the time of surgery. In the operative site certain muscles must be separated or retracted, some losing their points of origin and/or insertion. The intercostals of the resected ribs no longer have a skeletal attachment, thereby losing their balancing force on the thoracic cage and, indirectly, on the spine. The erector spinae may be exposed and retracted during the operative procedure.

4. Shoulder function is impaired indirectly due to the temporary or permanent loss of scapular stability resulting from the surgical sectioning or stretching of the middle and lower trapezius, the latissimus dorsi, the rhomboids, and the serratus anterior. After adequate time for healing, the

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Fig. 1. Postoperative five-rib right thoracoplasty, including first rib, without benefit of physical treatment program.

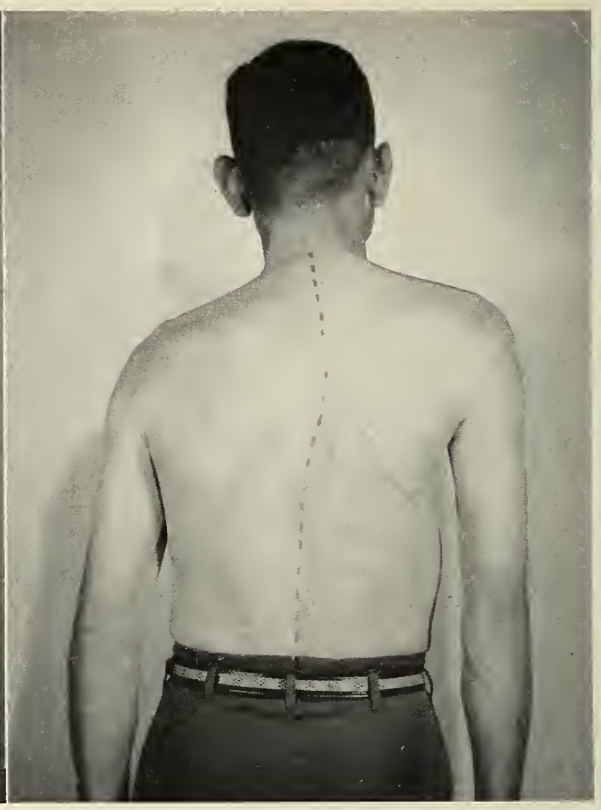


Fig. 2. Postoperative seven-rib right thoracoplasty, including first rib, without benefit of physical treatment program.

sectioned or stretched muscles require protection and meticulous muscle re-education in order to restore optimal function.

Post-operative Considerations

Post-operatively, there are many factors which may aggravate deforming tendencies of these surgical alterations. With the temporary loss of contractility of the musculature involved in the surgery, the uninvolved, and now unopposed, muscles of the shoulder girdle—namely, the upper trapezius, the pectorals and the levator scapulae—exhibit almost constant increased tonus, producing an involuntary elevation and anterior displacement of the shoulder. This may represent a reflex attempt on the part of the body to splint and protect the operated area; the scapula may impinge periodically on the upper remaining rib; or it may be that these muscles are called upon to stabilize the neck from its deviation toward the normal side. It is to be noted at this point that the scoliosis which may develop has its primary curve in the cervico-dorsal area, convex to the operated side, eventually compensated by a secondary cervical curve above, and a lumbar curve below. The anterior shoulder position is produced by the depression in the chest wall created with the resection of the ribs, the collapse of overlying soft tissues and the disturbed muscle balance. This brings the scapula forward, carrying the clavicle and humerus with it. This position places the lower scapular muscles at a mechanical disadvantage in certain of their movements. A bulky pressure dressing placed high beneath the axilla contributes temporarily to this displacement of the shoulder, as does the presence of the drainage tubes which are to be removed later.

Therapeutic Approach

It is with this complexity of functional alterations in mind that the physiatrist and the physical therapist present a concrete and objective therapeutic program to the patient pre- and post-operatively. The objectives as presented pre-operatively are repeatedly emphasized to the patient. Optimal position in bed is that of over-cor-

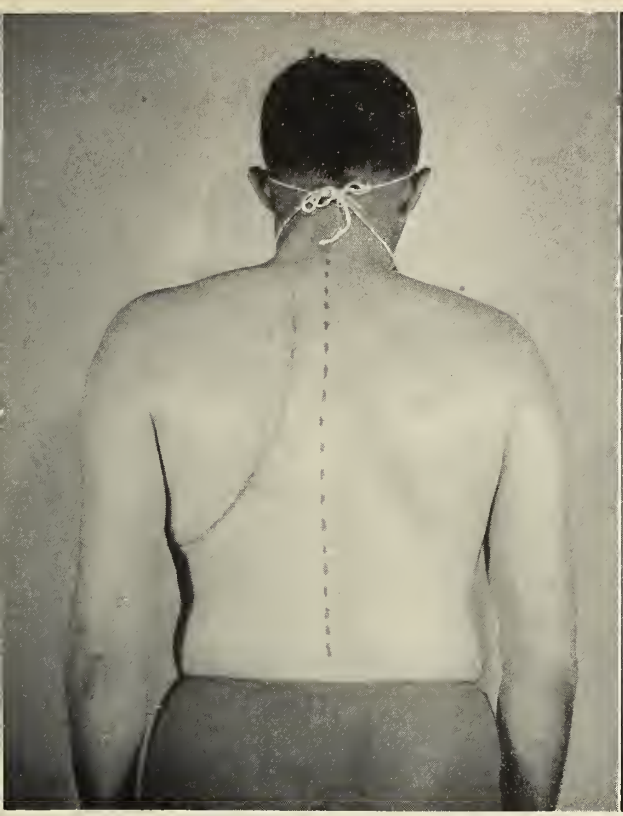


Fig. 3. Postoperative five-rib left thoracoplasty, including first rib, showing benefit of physical treatment.



Fig. 4. Postoperative seven-rib right thoracoplasty, including first rib, showing benefit of physical treatment.

rection toward the side of surgery. This includes alignment of the lower trunk and hips evenly in bed, with the upper trunk and operated shoulder consciously depressed toward the operated side. The head and neck should be aligned with the lower trunk or tilted moderately toward the operated side also. The attempt is to reverse the cervico-dorsal curve and to minimize the pull upward on the muscles about the operative site. As early as possible after the surgery the physical therapist initiates shoulder motion. The early passive and assistive movement of shoulder abduction, flexion, and rotation are extremely important in re-establishing a normal pattern of function. It is to encourage the use of the involved muscles and to minimize the overactivity of the uninvolved muscles. All of the altered mechanisms which have been described above tend to interfere with the normal return of function of the scapulothoracic muscles directly affected by the surgery and with the eventual return of a normal functional shoulder joint. It has been our policy to encourage motion only to 90 degrees at the glenohumeral joint until the sutures have been removed, following which complete range of motion is the objective. The patient is treated twice daily. seldom longer than ten minutes at a time. When ambulation is begun, the treatment period is spent before the full-length mirror on the ward. The upright position necessitates progressive modifications of the program, with continued emphasis to restore good body mechanics and normal shoulder function. Here it should be noted that these objectives should be attained as completely as possible before each successive stage of surgery. Thus, the physical treatment program is one which must be appropriate for each individual's needs and to his disease.

The problems after the thoracotomy without thoracoplasty are not the same, nor as complex, but the consequent deforming tendencies are equally significant to the patient. The difference is largely the difference in the surgical alteration of the functional anatomy. Again we have the sectioning of muscles of the posterior and posterolateral aspect of the chest, although usually to a lesser degree. Again there are the stretched muscles, the splinting of pain, the healing scar, the

wound dressing and frequently the drainage tubes. However, the thoracic cage remains intact. Frequently the procedure involves the removal of all or part of a lung, lowering the vital capacity of the operated side of the chest. Thus, the chest may be flattened and inactive. With this procedure the head and neck may be tilted laterally *toward* the affected side, later to become part of a compensated scoliosis with the shoulder tending to drop forward and downward *on* the affected side. The overcorrected bed position toward the unoperated side is stressed in these patients. Shoulder mobilization progresses much along the same lines as after thoracoplasty, but because of the vast difference in degree of structural change, re-establishment of a normal functional pattern is much simpler and requires much less time.

At this hospital we have not been teaching diaphragmatic breathing routinely in either type of tubercuIous thoracic procedure. We have reserved it for the selected case showing undue anxiety with shortness of breath and/or excessive chest movement, usually producing shallow, rapid, apprehensive, ineffective respirations. It has proved most gratifying in a repeated number of cases. We do give breathing instructions to the patient undergoing decortication where the objective is re-expansion of the involved lung.

The physical therapist must be equally aware of the contraindications to her treatment. Among these are (1) fever of 100 degrees or more, (2) hemoptysis, (3) dyspnea, (4) wound infection, (5) cardiac dysfunction, and (6) any other untoward change in clinical status. It is her responsibility also to all patients to avoid exercises that will increase the rate of respiration or produce fatigue.

Each patient receiving physical treatment is seen at weekly intervals on the ward by the physiatrist. Progress notes are recorded, noting the gains as well as any deforming tendencies in the patient. In this way any indicated modifications in treatment may be discussed by the three individuals concerned and then prescribed by the physician. Before the patient leaves the surgical ward he is reminded of the need to maintain his gains by applying the principles he has been taught.

Conclusion

The administration of physical treatment to the patient with tuberculosis is still comparatively new, but there has been sufficient time since the introduction of these techniques to permit an accurate appraisal of their effectiveness in preventing and overcoming physiological losses and to prove their innocuous effect on the tuberculous process itself. Clinical experience has shown that when selected therapeutic exercises and procedures are properly administered and supervised they do not interfere with collapse therapy, do not increase the excursion of the expanded lung, nor result in any untoward reaction in the patient. One of their further recommendations is the satisfaction derived by the great majority of patients in approximating optimal function and cosmetic appearance following an otherwise traumatic physical and psychological experience.

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MALARIA AND TUBERCULOSIS IN LATIN AMERICA

Examination of mortality and morbidity data leads to the conclusion that malaria and tuberculosis were the outstanding disease problems in Latin America during the decade 1942-52. Such diseases as yaws, hookworm disease, Hansen's disease, schistosomiasis, and epidemic typhus, however, also constituted problems, and in some areas one or another of these rivaled malaria and tuberculosis for a top-ranking position.—Institute of Inter-American Affairs, Public Health Reports, November, 1953.

The Turning Point in the Attack on Tuberculosis

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WE HAVE reached, at present, what should be a turning point in our attack on tuberculosis. To date, most of our work has consisted of seeking the damage done by the tubercle bacillus and trying to repair it. This has been necessary in bringing about the present situation. But from now on our major attack must be on the tubercle bacillus itself rather than just the destruction it causes.

In 1870, more than 13 per cent of all deaths in Michigan were reported due to tuberculosis. In 1923, there were 2,837 tuberculosis deaths, which was 6 per cent of all deaths in Michigan, or a mortality rate of 70.7 per 100,000 population. In 1952, there were 776 tuberculosis deaths, a mortality rate of 11.5 per 100,000. This was only 1.3 per cent of deaths for all causes. Of Michigan's 83 counties, 22 reported no deaths from tuberculosis in 1952; two reported no deaths from tuberculosis in the past five years.

This marked reduction in mortality is resulting in a sense of false security to the extent of danger of relaxation of effort against tuberculosis and diversion of funds, time, and energy to other health problems. This could result in the loss of all that has been accomplished in the fight against this disease. Within two or three decades, tuberculosis could occupy the same stronghold it held fifty years ago.

At that time, anti-tuberculosis work was confined largely to taking care of the ill and the dying. There was little time or funds for anything else. As fast as possible, hospital and sanatorium beds were provided. In this way, many persons with contagious disease were removed to institutions where their organisms could not be spread to many people.

Although this resulted in a marked decrease in the spread of tubercle bacilli, there were still many contagious cases which had not been found. Moreover, large numbers, perhaps the majority, of adults had earlier been infected by, and still harbored, tubercle bacilli. Despite their apparent normal health there was certain to be a sizable annual crop of clinical tuberculosis evolve among them. Such individuals kept the sanatoriums filled to capacity and often provided long waiting lists for beds. However, the number of persons who at all times were isolated in sanatoriums and the successful work of veterinarians greatly reduced the number of tubercle bacilli.

Veterinarians and their allies knew that when tuberculosis was left unmolested in cattle herds it doubled itself every 15 years. The losses from death of animals in the fields and from decreased production of consumptive animals was a tremendous economic problem. Veterinarians also knew that tuberculosis among cattle was contagious for other animal species and for people. They knew that the bovine type of tubercle bacillus caused just as serious disease in human tissue as in animal and, in fact, resulted in the crippling and death of many people. Veterinarians and their allies began removing consumptive cattle from their herds thus markedly reducing the spread of this type of disease to both people and animals.

But more refined methods of diagnosis and management of cases were necessary. Veterinarians adopted the tuberculin test as the sole diagnostic agent among animals because they found that all reactors had tuberculous lesions.

Michigan has the distinction of having Hillsdale county selected as the first in the United States to place tuberculin testing of all cattle on a county-wide basis.* This was in 1921. Up to that time,

*Hillsdale County is further distinguished as the birthplace of Howard R. Smith who played so large a part in the national program for eradication of bovine tuberculosis. He graduated with high honors from Michigan Agricultural college in 1895, after which he was chief of departments of animal husbandry in at least two state universities. He held positions on important committees in Washington and traveled about the nation in an educational campaign designed to establish a great national tuberculosis eradication movement. He, more than anyone else, was responsible for the first appropriations made by the federal government to eradicate tuberculosis from cattle, a step which has resulted in man's greatest victory over tuberculosis to date. In 1917, he became livestock commissioner for the Chicago Livestock Exchange. His educational work dealt one blow after another to tuberculosis throughout the remainder of his professional career. He retired in January, 1951, and now resides in Somerset, Michigan, near the farm where he was born.

Every citizen of Michigan should read the biography of Howard R. Smith by H. Clyde Filley. It refers to him as the farm boy who added many millions to the wealth of America and contributed much to the benefit of human health. Mr. Smith is still active, having published an article on the eradication of tuberculosis in cattle in a medical journal in April, 1954. He has such a tremendous store of information that he could render invaluable aid to physicians and all others interested in tuberculosis in Michigan.

testing of cattle had been more or less a hit-and-miss proposition and, as a result, little progress had been made in controlling the disease. Placing the testing of cattle on a county-wide basis was a manifestation of vision and forethought. This program was promoted by students of tuberculosis among animals who knew that each reactor was a potential reservoir of tubercle bacilli. Therefore this scientific and practical attack was made on the germs themselves by finding where they lurked and acting accordingly. The Hillsdale county program was so effective and spread so fast, that by 1930 every county in Michigan was declared an accredited area.

Today there are 2,003,000 cattle in Michigan. Of the 207,454 tested in the fiscal year 1953, only 440 reacted or 0.021 per cent, approximately one in 5,000. Only twenty were condemned as unfit for food.

Dr. Lee Davisson, present state veterinarian in Michigan, his predecessors and co-workers, deserve much credit not only for nearly eradicating tuberculosis in cattle but also for the marked decrease of the disease among people.

Refinements in the diagnosis of tuberculosis in humans have been phenomenal. Hippocrates diagnosed this disease by the consumptive state of its victims. Auenbrugger devised percussion and Laënec invented the stethoscope. For several decades the disease was diagnosed by the presence of symptoms and physical signs. Koch found the tubercle bacillus and Roentgen discovered the x-ray. Each of these procedures in turn was thought capable of discovering all tuberculosis. Then it was observed that many persons without symptoms or physical signs had lesions, often advanced ones, which cast demonstrable x-ray shadows in the total absence of symptoms and abnormal physical signs. It was then thought that no important tuberculous lesion could be missed by x-ray film inspection of the chest. Now we know that the x-ray is beset with serious limitations. Postmortem examinations, pathological and bacteriological studies of surgically resected lungs, lobes, and smaller units, frequently reveal much more disease, including gross lesions, than can be demonstrated on x-ray film.

It was then thought that by thoracotomy the surgeon could palpate practically all lesions in the lungs. We know now that in resected units the pathologist often finds many small lesions not suspected by x-ray film and not palpated by surgeons.

The only method at our command which will diagnose the presence of tuberculous lesions, regardless of size or location, and do so within a few weeks after tubercle bacilli invade the body, is the tuberculin test. This was clearly demonstrated by Ghon in the second decade of this century and has been confirmed so frequently among people and well-nigh four million times by veterinarians with such completely established efficacy as to make it imperative in every examination for tuberculosis.

The medical, nursing, and veterinary professions, along with tuberculosis and health associations and the entire citizenry of Michigan, have worked hard and long to reduce mortality, morbidity, and infection attack rate from tuberculosis. It has been a long and difficult task because tuberculosis, by its very nature, is a lifetime disease. When tubercle bacilli invade the body, whether it be early or late in life, cultures of these organisms are likely to perpetuate themselves for the remainder of the individual's life span. From the time of the initial invasion, there is always the possibility that clinical and contagious disease will develop. In fact, only such infected persons fall ill from tuberculosis. Usually before they are aware of it, they are disseminating tubercle bacilli to their associates. Thus the tubercle bacillus continues to perpetuate itself among the people of Michigan, just as it has done in various parts of the world since prehistoric days.

Even in the counties where no death from tuberculosis has occurred for a year or longer, complete victory over tuberculosis is not half won. The present and future problem in these counties is not determinable by mortality and morbidity, but by the number of persons who now harbor tubercle bacilli. That number can be determined promptly and accurately only by administering the tuberculin test to entire county populations. Such county-wide tuberculin testing has already been done in another state in areas with low mortality and morbidity rates where slightly more than 20 per cent of the citizens were found infected. The incidence of reactors was exceedingly low among children and young adults, but it was as high as 40 to 50 per cent among those in the later decades of life. These older persons were not protected against bovine or human type of tubercle bacilli when they were infants and children. They are still harboring colonies of tubercle bacilli which invaded early in life.

Everyone who harbors tubercle bacilli and therefore reacts to tuberculin is a potential case of clinical and contagious tuberculosis. In fact it is these persons and those whom they may infect who will provide an annual crop of clinical lesions. Tuberculosis will never be eradicated as long as people or animals are allowed to develop contagious disease and disseminate bacilli to their associates.

The solution of this problem consists of finding all persons, regardless of age, who harbor tubercle bacilli and examining them periodically with such frequency that chronic lesions which evolve are found before they cause symptoms or are contagious. Such evolving lesions can be found so early that most of them can be promptly controlled by our present therapeutic armamentarium so that neither symptoms nor contagion occur. Thus the tubercle bacilli which such persons harbor are not permitted to escape.

Eradication will not be achieved in any area as long as one person reacts characteristically to tuberculin. To attain eradication, which must now be our goal, is a long, tedious task which requires a tremendous amount of energy from the veterinary, medical and nursing professions with close co-operation of the citizenry. It has been demonstrated that this co-operation can be procured by special techniques. One of these consists of officially accrediting counties with reference to achievement in tuberculosis control. This is done by co-operative effort of state and local medical organizations, state boards of health and state and local tuberculosis associations. In one state where accreditation of counties was initiated in 1941, approximately 60 of the 87 counties have been or soon will be accredited. Another technique that has proved exceedingly efficacious consists of officially certifying schools with reference to tuberculosis control work in progress. This method was devised by the Committee on Tuberculosis of the American School Health Association which has medical subcommittees in each state. It requires co-operation of local physicians, nurses, social workers, parent-teacher associations, school administrators, tuberculosis associations and in fact, the entire community. In one state nearly 2,000 schools have been so certified and the doom of the spread of tubercle bacilli among personnel and students has been spelled.

This is the time to intensify rather than relax effort against tuberculosis. The medical profession must assume leadership and work in close co-operation with all other organizations and the entire public.

At this turning point in our attack on tuberculosis an opportunity exists for the medical profession and its allies to truly win a victory over tuberculosis to the same degree as has been done with other diseases including smallpox, diphtheria and typhoid fever.

GAMMA RADIATION

Atomic energy is being used by University of Michigan surgeons to sterilize heart arteries.

At the American College of Surgeons meeting in Atlantic City, Nov. 11, 1954, three University of Michigan doctors, Jack A. MaCris, M.D., Herbert Sloan, M.D., and John E. Orebaugh, M.D., stated that extensive studies carried out at the Michigan Medical Center have demonstrated the "bactericidal effect of gamma radiation."

The sterilizing agent is Cobalt 60, a basic element resembling iron but converted into a radioactive source in an atomic pile. The University has the largest non-government gamma source in the country.

The increased use of arteries for transfer to a damaged or diseased artery has intensified the search for a means of sterilizing the transplantable tissues. However, the sterilizing technique must both eliminate infectious contaminants as well as preserve the structure of the artery.

Atomic energy has proved effective against smaller viruses as well as disease-producing yeasts. Not only was the atomic sterilization effective against germs, there was no evidence of degenerative changes in any of the grafts.

Said the report, "It was felt that no adverse changes in the aortic segments (blood vessels) could be attributed to gamma radiation."

The University of Michigan surgeons also reported that the dose of radiation depends upon the susceptibility, size and physical state of the microorganisms. Further studies are under way to test the tensile strength of irradiated grafts. And there is some indication that smaller viruses will require higher doses of irradiation before the technique can be applied with impunity to human specimens.

To the transplantation of blood vessels grafts, in itself a highly delicate and dramatic operation, is now added another chapter in the peace-time use of atomic energy.

Hospital Admission Chest X-Ray Examinations

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ONLY 22 per cent of short-term hospitals in the United States[7] provide admission chest x-ray examinations despite Hodges'[3] demonstration of the utility of hospital admission chest x-ray examinations twenty years ago. The cost of equipment and added cost to the patient may be deterrent factors but the advantages to be derived from the method far outweigh the financial considerations. It is the purpose of this paper to discuss briefly some of the advantages, economics and techniques of general hospital admission chest x-ray surveys. It should be understood that pre-employment and periodic chest film examinations of all hospital employes and attending physicians are implicit in such filming programs.

Although the mortality and morbidity of tuberculosis have been greatly decreased in recent years, the problem of detection of tuberculosis is still important. Kuechle[4] even predicts that the cost of compensation insurance will decrease when hospital routine admission chest programs are more generally accepted. Tuberculosis in hospital patients is of special interest and importance because of differences in incidence, stage of disease, et cetera. Hospital patients show a higher incidence and more advanced forms of tuberculosis[5] than the general population. Schneider and Robins[6] state that unsuspected active tuberculosis is four to eight times more prevalent in hospital patients than in the non-hospital population. Medlar[8] and Myers[9] stress the importance of x-ray study of patients over 50 years of age. Medlar has shown that active tuberculosis is more frequently overlooked in hospital patients over the age of fifty years than in patients under forty years. For these and other reasons tuberculosis continues to offer a challenge to the medical profession, notwithstanding recent great strides in the treatment of this disease. Contrary to popular opinion some localities[8] have recently reported an increase in the incidence of tuberculosis. Since tuberculosis represents an important communicable and preventable disease we must redouble our efforts to stamp it out.

Tuberculosis accounts for about 10 to 20 per cent of clinically significant positive findings found during the course of routine chest filming of hospital patients.[10] Many unsuspected cases of tuberculosis and other significant disease processes are uncovered by routine admission examinations. Included in the non-tuberculous group are heart, great vessel and diaphragmatic abnormalities; inflammatory and infectious conditions; primary and metastatic lung, mediastinal, pleural and osseous lesions; esophageal abnormalities; et cetera. Significant abnormalities detected by hospital x-ray screening studies are not confined to the thorax and its contents. Not infrequently lesions involving adjacent portions of the body are detectable on minifilms. For example, a case of unsuspected osteochondromata of the long bones of the upper extremity was detected on an admission minifilm of a child entering the hospital for tonsillectomy.

Admission chest survey films can be utilized to diagnose or suspect disease in the abdomen. We are all acquainted with changes in the lower portions of the lungs, pleural cavities and diaphragm wrought by disease in the abdomen. One should always keep in mind the possibility of intra-abdominal disease when abnormalities in the structures mentioned are found. The subdiaphragmatic region should be inspected on all films. The gastric air bubble represents an important diagnostic landmark. Neoplasms of the proximal stomach encroaching on this air bubble are visible in chest minifilms. Pneumoperitoneum due to ruptured viscus can be detected as well. We have encountered at least two such unsuspected cases. Ruptured duodenal ulcer and pneumatosis cystoides intestinalis were the causes of subdiaphragmatic gas in these elderly male patients.

A subject attracting much attention and interest today is primary carcinoma of the lung. The incidence of this form of carcinoma is increasing alarmingly, the actual increase exceeding other forms of cancer. The only means at our command at present to detect this lesion "early" or in its asymptomatic phase is periodic chest x-ray examinations of all adults thirty-five years or older. Semiannual or no less than annual survey

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chest film studies are obligatory if the prognosis or cure-rate of this disease is to be improved. Routine hospital admission chest x-ray studies are one means of achieving this goal.

There are other useful purposes served by hospital admission films, one of which is in the field of compensation and insurance cases and disputes. This is particularly true in traumatic cases, even in the absence of symptoms referrable to the chest. An example will illustrate this point. A patient entered Deaconess Hospital for treatment of a fractured mandible. The admission chest minifilm showed unsuspected eventration of the left hemidiaphragm. Indirect trauma was the cause because a city survey film one month previously contained no such abnormality. The availability of an admission film obviated subsequent drawn-out litigation, thus enabling all parties concerned to appraise the merits of the case on an equitable basis and without doubt as to the etiology.

The value of routine chest films is, of course, not confined to traumatic cases. These films in general constitute important components of hospital records, all the more valuable when need for comparison with subsequent x-ray studies arises. In such instances x-ray diagnosis is facilitated and more precise. The value of admission minifilms increases with the length of time the survey program has been in existence. The opportunity to compare chest films of the same patient becomes more frequent as such programs continue, often giving an insight into the pathogenesis and duration of disease.

There may not be unanimity of opinion concerning costs of and charges for routine hospital chest x-ray examinations. It is agreed, however, that the cost of hospital surveys is much greater than of mass surveys. If it is accepted hospital practice to charge patients for laboratory tests there is no legitimate reason for not handling admission chest x-ray examinations on the same basis. The benefits derived by the patient are by no means less—if not actually greater—than with routine laboratory examinations such as urinalyses, blood counts, et cetera. Furthermore, the responsibilities assumed by the radiologist in supervising such programs and interpreting films are as great as with any other types of x-ray examination. For these reasons we believe that radiologists' remuneration should be proportionate to the charge made for the examination or on the same contractural basis as other hospital roentgenographic procedures.

Minifilm x-ray procedures are, in our opinion, practicable for almost all hospitals. The main reason for this statement is the considerable difference in cost between 14 x 17 inch and minifilms (70 mm. and 4 x 5 inch). The difference in film cost processing and storage costs should enable hospitals to amortize the cost of fluoroentgen equipment in a few years, depending on the volume of work. In smaller hospitals the fluororoentgen camera can be connected to existing equipment of 200 milliampere or over capacity. In larger hospitals where the volume of work is greater a separate or complete admission chest fluororoentgen installation may be necessary. In either type of set-up a charge of $2.00-$3.00 per minifilm examination seems appropriate in private general hospitals. Such a charge represents actual cost, including provision for double reading or two interpretations of the individual survey films.[1,2]

Earlier in our work we were of the opinion that for any program to be successful it was necessary to provide twenty-four-hour technical facilities. We find now, however, that a high degree of efficiency can be achieved during regular hours of operation of the x-ray department. We are now able to examine over 99 per cent of all patients at the time of, or within ten to twelve hours after admission to the hospital. The great majority of patients are examined on entrance to the hospital. Critically ill patients unable to come to the department of radiology are examined at the bedside by means of 14- x 17-inch film. In properly supervised hospital survey programs admission chest x-ray examinations can be performed as smoothly as routine laboratory tests, provided the examinations are mandatory.

For routine chest programs to be maximally effective, prompt processing and interpretation of films are necessary. The value of such films may be partially dissipated if such service is not provided. The screening qualities of minifilm studies often affect the treatment of hospital patients.

Summary

We concur wholeheartedly with the majority opinion that hospital admission or routine chest x-ray filming is an economical, worthwhile and necessary procedure. There are few, if any, other

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Michigan's Plan for the Control and Treatment of Tuberculosis in its Mental Institutions

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TUBERCULOSIS in the mentally ill has long been considered a hopeless and incurable affliction. Both diseases were thought to be irreparable, and the spread among the inmates was so extensive that it seemed a waste of time and effort to do much about the situation with consequent tragically high morbidity and mortality. The most optimistic, humanitarian and conscience stricken felt that screening and some form of segregation and isolation was a real accomplishment. Mental hospitals had no provision or classification for clinicians or phthisiologists. State and local health departments and tuberculosis societies ignored and neglected this phase of tuberculosis control.

Such pessimistic attitude is rapidly giving way to one of more optimism, and definite and concrete measures are now being taken to remedy and correct a deplorable condition. These are largely due to the enlightened attitude toward mental illness and to the remarkable strides made by the antibiotic drugs in the treatment of tuberculosis. More and more favorable reports are being made about the response of the mentally ill to modern medical-surgical management of tuberculosis and as the evidence accumulates it appears that this long-dreaded scourge will soon be effectively controlled.

For purposes of discussion, the chronically, mentally ill can be divided into two very broad and overlapping classifications, the psychoneurotics and the psychotics. The psychoneurotics are in some sort of contact with reality and have some prospect of being rehabilitated, while the psychotics are confused and have comparatively little prospect of ever being released from the hospital. It is useful to discuss each group separately since the type of psychotherapy is distinctive, the objectives of treatment of their tuberculosis is different, and the manner of correlating the two diseases is a problem. It requires patience, tact, ingenuity, and experimentation to keep such a varied group of mentally disturbed on an even keel, while it is doubly difficult to properly segregate and isolate them when they have tuberculosis.

The psychoneurotic group is a conglomeration of maladjusted individuals who are so immature and insecure that they cannot face the responsibility of competitive living and are hospitalized when society will not tolerate their antisocial behavior. These patients are the severe psychoneurotics, the hypochondriacs, the alcoholics, the borderline mental defectives, the psychopathic personalities and the recalcitrants who leave the sanatoria against advise because they will not conform to restraint and authority. As patients, they are unreasonable, impetuous, impatient, and volcanic, so that it takes much time, attention, and careful handling to make them realize the seriousness and chronicity of tuberculosis. Strict bedrest is intolerable to most of them so that they must be allowed some freedom of activity along with limited recreational and occupational therapy. Observations on a limited number of cases have shown no deleterious effects, and most of them, especially if they have a setback or two, gain in maturity and become good resters and tractable patients.

These patients are younger and, being in the minority, feel lonely and resentful because they are not allowed ground privileges. They feel that they are outcasts because they are afflicted with an infectious, communicable and stigmatizing disease. The medical and surgical management is more difficult and trying because of the great amount of anxiety and apprehension.

The psychotic group are largely the chronic deteriorated schizophrenics and senile psychotics. There are a lesser number of deteriorated epileptics, morons, congenitally-deformed idiots, and a variety of the other psychoses. Most of these are confused and chronically ill so that they are likely to be residents of some state institution for life.

These patients are intriguing, interesting, baffling at times, and require careful handling. They are a very important group since they have long been neglected, forgotten and untreated, and

it is largely on their account that such a hopeless attitude has previously been taken toward tuberculosis in mental institutions. It was among them that the most serious incidence of tuberculosis existed, since many had open cavitary disease and the organisms were spread indiscriminately.

The primary objectives of treatment among this group are segregation, isolation, and conversion of sputums. Thoracoplasty is generally the preferred type of treatment. Where the most difficulty might be expected, the best results are attained. The mentally confused have an almost animal-like trust in those that treat them kindly and they have an unusual desire to co-operate when they feel that someone is trying to do something for them or is giving them some consideration and affection. They seem to have a primitive and instinctive sense as to what and how much they should eat, when to get out of bed, and how much activity they can tolerate. Preoperative and postoperative anxiety and apprehension are minimal and complications are comparatively rare. Pain and soreness are well tolerated and analgesics are rarely needed after a day or two following surgery. It is not unusual for a patient to get out of bed a day or two following a thoracoplasty and begin moving his arms about, denying that he has had an operation and saying that he has had a minor bump that is causing his soreness. Sputum cups and tissues are neither practicable or necessary. Coughing and spitting are not troublesome, and even those who are untidy in their bowel habits, rarely expectorate on the floor.

Complete bedrest is often not attainable and supervised smoking and intermingling is permitted. When acutely ill, they spend much time in bed, but as they begin to feel better they stir around more and seem to find their proper level of activity. They take afternoon rest surprisingly well and go to bed early. The amount of activity does not seem to have much effect on tuberculosis since many hyperactive cases do much better than the catatonics. Deformities after thoracoplasty are average.

The effects of the antibiotics are good even when given over a period of two and one-half years. Reactions to dihydrostreptomycin are uncommon. Many cases are mute and do not talk so that eighth nerve auditory involvement is difficult to evaluate, but to date no definite cases have been observed. Sodium PAS is used exclusively because it is easy to give and except for an occasional gastrointestinal upset, very few adverse symptoms have been seen. Isoniazid is well tolerated.

Michigan is justifiably proud of its enlightened attitude toward mental illness and has been in the forefront in the care of tuberculous mental patients. Isbister et al[1] reported on the program at Ionia State Hospital in The Journal of the Michigan State Medical Society in November, 1951. This regime was so successful that tuberculosis among the criminally insane is negligible and easily handled. Duiker et al[2] made a preliminary report on the program at the Traverse City State Hospital in The Journal of the Michigan State Medical Society in July, 1953.

The program at the Traverse City State Hospital has now been in effect for two and one-half years. The plan evolved so satisfactorily, and the medical and surgical treatment were so successful in reducing the number of active cases of tuberculosis, that it became a pattern for similar programs elsewhere and has led to a plan that will soon include all the state mental hospitals. This plan is the result of the united efforts of the administration and clinical staff at the Traverse City State Hospital, the Department of Health, and the Mental Health Commission.

The Mental Health Commission has designated the Traverse City State Hospital as the first to receive a 100-bed tuberculosis unit. It had contemplated building three or four more in other locations, but as it was shown that they were not needed, plans for these others were abandoned. It became evident that the results of modern treatment would reduce the number of active cases so drastically that there would not be enough cases from the Traverse City State Hospital to fill the new unit. It was then decided to invite other hospitals to contribute patients to it.

The first hospital invited was the Newberry State Hospital, a 1,900-bed mental hospital. Their administration was confronted with what seemed to be a hopeless proposition. Admission films were taken, but since no roentgenologist was easily available, their films were read irregularly. The known cases of tuberculosis were x-rayed at long intervals, laboratory facilities were hard to get, and there was no tuberculosis clinician on the staff. The filing and numbering of films in the x-ray department was chaotic. Percursory isolation was practiced and no active treatment was given.

The tuberculosis control officer from the Department of Health and the tuberculosis clinician from the Traverse City State Hospital assisted in organization of their program. An efficient isolation unit was set up and a physician was assigned. Changes were made in the filing and tabulation of films and a tickler system was established so that all cases would be x-rayed at stated intervals. Arrangements were made for a laboratory to perform sputum studies and for all films to be sent to the Traverse City State Hospital for reading, interpretation, and advice as to treatment.

All available films on active and inactive cases were then reviewed. The active were placed on the isolation ward and started on chemotherapy. The doubtful cases were studied bacteriologically and when found to be active were started on medical treatment. Those that required surgery were given a preliminary course of antibiotics and then sent to the Traverse City State Hospital for operation. After surgery they were returned to Newberry for long-term chemotherapy.

Caro State Hospital for the Epileptics had been sending some of their cases to Traverse City. The arrangement was unsatisfactory because laboratory facilities were absent and the diagnosis was made on x-ray findings only, so that a number of non-tuberculous cases were transferred. A roentgenologist was not readily available, so that there were long delays in getting readings and interpretations. Here again a physician was assigned, the x-ray system revised, and it was agreed that all films would be sent to the Traverse City State Hospital for reading, interpretation, and advice.

Northville State Hospital, a newly-opened hospital for the mentally ill, was located in the Detroit area. They had no backlog of old cases and had an efficient x-ray and laboratory, so that it was agreed that all proven cases of active tuberculosis were to be sent to the Traverse City State Hospital.

State sanatoria in the Northern Michigan area have been sending their disturbed patients to the Traverse City State Hospital. A number of recalcitrants have recently been sent for treatment.

The Traverse City State Hospital program began in October of 1950 and the first surgery was done in August of 1951. Because of the large number of cases that needed urgent treatment, and the fact that antibiotics were given for relatively short periods, it was felt that pneumoperitoneums and phrenic crushes along with chemotherapy might be valuable in keeping these cases under control until definitive surgery could be done. Fifteen cases were treated in this manner. In this series one man died from an air embolus and one of a ruptured gastric ulcer. Two spread while carrying a good pneumoperitoneum. The remainder were abandoned after two years because it seemed that the maximum advantage had been attained. As it became possible to give antibiotics over longer periods of time, there seemed to be no advantage in continuing pneumoperitoneum procedures and it was abandoned.

Resectional surgery was done in eight instances. These patients were somewhat younger and had less extensive disease than the thoracoplasty group. Their ages ranged from twenty to fifty-six years. Their mental illness was less serious and it was possible to send four patients home with an arrested tuberculosis and sufficiently improved mentally to make at least a marginal adjustment outside the hospital. One man died from a cerebral embolus three days after an extensive decortication and upper lobe lobectomy. Another died four months after an upper lobe resection from a recurrence in the lower lobe. Both of these were severe catatonic schizophrenics.

Ten patients received twenty-one thoracoplasty stages. With one exception, these patients were chronic schizophrenics, forty to sixty-five years old. All had been mentally ill for many years and had chronic cavitary tuberculosis that required thoracoplasty. An acute schizophrenic with a fulminating tuberculosis and a large cavity became sputum negative after surgery and improved sufficiently mentally so that he could be sent home. There were no deaths in this series and only one bronchogenic spread which improved under prolonged chemotherapy. One man is now on family care, but the others will probably be lifelong residents at some institution.

The Newberry State Hospital series is only two years old, but the results appear to be comparable. There were six resections with no deaths and only minor complications. There were eighteen thoracoplasty stages on nine patients. One sixty-five-year-old female, who had had a large cavity for ten years, died eight hours after her second stage from a pulmonary embolus. One sixty-year-old female died from a massive

atelectasis three days after surgery. Another recovered from a massive atelectasis following bronchoscopy. At this time there have been no recurrences.

A breakdown by years gives further evidence of the effectiveness of the well-organized regime. Deaths in the first year are high because of the mortality among the hopelessly far advanced cases. Tapering off occurs in the second year, but there are now inevitable operative deaths. In the third year deaths are still less. There has been no death from tuberculosis in this hospital for almost two years.

The first year is generally necessary to make bacteriological studies and initiate chemotherapy. Surgery is abundant in the second year and tapers off rapidly so that after the third year a sustaining program only is necessary and this is rather easy to maintain.

The population in the isolation wards shows a corresponding change, decreasing each year so that at the fourth year there are relatively few cases. The number of cases moved into the newly completed tuberculosis unit in April, 1954, was 25, and many of these were those received from the participating hospitals.

The number of new cases found in the annual mobile unit survey is remarkably low. There are 3,550 patients and employes x-rayed each year at Traverse City and the average number of actives found is four. One attendant was found to have active disease, but he did not work on the tuberculosis ward. It is thought that admission films and a careful check of all tuberculosis in the hospital is responsible for this low rate of incidence. The experiences at Newberry are similar.

From the experiences and observations made since the initiation of an organized program, certain definite conclusions can be drawn.

1. The extent and seriousness of tuberculosis in mental hospitals is rarely as bad as had been anticipated. When bacteriological studies are correlated with x-ray findings, many cases that were thought to be active prove to be inactive and do not need treatment or isolation. Spread of the disease is retarded by chemotherapy and when combined with surgery the great majority of patients can convert their sputums. The death rate and the number of active cases on isolation can be markedly reduced in three years. A sustaining program is relatively simple.

2. Routine admission chest films, careful and regular follow-up of active and inactive cases, and a yearly mobile unit survey, is a very effective method of controlling the incidence of tuberculosis.

3. It is comparatively simple to organize an effective program in each hospital. The core of this organization must be in the x-ray department. A fool proof system must be set up so that all new and old patients should be x-rayed at stated intervals. The services of a trained phthisiologist must be made available. An efficient and reliable laboratory must be accessible. An isolation unit must be established for treatment and observation of active tuberculosis.

The Department of Health through its tuberculosis control officer worked in close co-operation in the overall state-wide plans. The Mental Health Commission was kept informed and has watched developments with much interest. The other mental hospitals became cognizant of what was happening and some are now asking to be included in the plan. Ypsilanti State Hospital was the first large hospital that has been surveyed. With the opening of the new unit at Traverse City State Hospital, 25 or more patients will soon be moved here. These patients will be selected because they have open tuberculosis and need immediate active treatment and eventually some surgery. Pontiac State Hospital and Coldwater will be surveyed and the same type of patient selected for transfer. The present plan is to fill the new unit at the earliest moment.

In February, 1954, the Department of Health and the Tuberculosis Unit of Traverse City State Hospital made the following specific recommendations to the Mental Health Commission:

1. The entire population of the mental health system shall be surveyed yearly by miniature films of the mobile unit.

2. Routine x-ray films of the chest shall be made of all new admissions and personnel.

3. All known active and inactive cases of tuberculosis shall be x-rayed at regular intervals.

4. Since Traverse City has recently moved into a modern tuberculosis hospital with a working treatment and control program and has a staff that is capable of giving competent medical and surgical treatment, it is suggested that this hospital be designated as a central unit.

5. Chest films from all participating hospitals shall be forwarded to the central unit for interpretation,

decision as to what treatment or studies are to be made, and what disposition should be made of each case.

6. A central registry shall be established at the central unit so that all tuberculosis in the system can be kept under observation. Sectional registers shall be kept at the respective mental hospitals.

7. Each hospital shall establish an isolation unit where studies can be done and where chemotherapy can be given. When special treatment or surgery is required, patients shall be transferred to Traverse City State Hospital.

8. Since Kalamazoo State Hospital has a 150-bed tuberculosis unit with a comparatively small number of active cases, it is recommended that this hospital might be used for treating those cases that need only antibiotics. It is felt that this arrangement will be needed for only a few years since it seems likely from past experience that all cases can eventually be taken care of in the 100-bed unit at Traverse City.

A few years ago such an ambitious program would have seemed an idle dream. Now it has proven entirely practical and feasible. To succeed it must have the wholehearted co-operation of all the hospital administrations. Someone must be willing to do the hard work that is necessary to get the program underway. An efficient organization composed of the laboratory, the nursing and operating room staff, and a medical and surgical team must be organized. The Mental Health Commission and the hospital administration must have a progressive attitude towards control and treatment of tuberculosis. The legislature should appropriate sufficient funds to operate the program. Though apparently costly in the beginning, many dollars and much human suffering will be saved in the future.

The solving of this perplexing problem is another milestone in the advances made by modern medicine. The humanitarian aspects are tremendous. The feeling of well being, increased appetites and gains in weight on patients on the antibiotic drugs is gratifying to observe. Much happiness is experienced when a supposedly hopeless case is allowed to go home in good health. The release from an isolation ward and the added privileges that can be allowed when a communicable disease is cured enlarges the mental horizons of those who must spend their lives in a mental hospital.

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HOSPITAL ADMISSION CHEST X-RAY EXAMINATIONS

(Continued from Page 1239)

hospital examinations which offer more advantages to the patient at so little cost.

So long as significant disease in the chest can escape detection by other means, it behooves all physicians to actively support methods developed to obviate such deficiences.

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Drug Treatment of Tuberculosis

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MAN has long sought a cure for tuberculosis. His efforts have extended from early sorcery to current surgery, from the unintelligible efforts at diet and the trials of the alchemists to chemotherapy of the present day. For perspective, let us have a look at an early formula or two. "A wolf's liver infused in wine, the lard of a lean sow fed on vegetables, and asses flesh, together with the broth." This ancient and standard treatment for consumption was offered by Pliny the elder. Also "The smoke of dry cow dung, drawn through a reed, and the tips of bullock's horns, burnt and powered and mixed with honey" represents therapy current at the time of the American Revolution—these for the cure of tuberculosis. From such medicines to streptomycin, from bloodletting to pneumothorax, from vigorous exercise like rowing and horseback riding of but a generation ago to strict bed rest: from sea voyages as crew member to present-day surgery, there is progress. Particularly in the last decade, with chemotherapy and the greatly widened application of surgery, modern treatment of tuberculosis, imperfect as it is, is on the move in a stimulating and challenging way not experienced since those productive years that followed immediately after the discovery of the tubercle bacillus. It has profoundly affected our generation with results to be seen in the declining incidence of morbidity and mortality. Recently D'Esopo[1] has presented a clear, concise picture of the clinical and bacteriological implications of this question.

Three drugs stand out chiefly and effectively at this time against tuberculosis; streptomycin (and dihydrostreptomycin), para-amino salicylic acid and isonicotinic acid hydrazid. The properties and potentialities for good and for ill are now well recognized for these drugs. When used in proper connection with other accepted modes of treatment, they greatly enhance the patient's chances of recovery—so much so that withholding them, in general, constitutes a form of medical neglect. But it is of the greatest importance to integrate their use into the general scheme of bedrest care now so well established. These drugs are abbreviated as follows: streptomycin, SM; dihydrostreptomycin, DHSM; para-amino salicylic acid, PAS, and isoniazid, INAH.

It is well known that (1) when streptomycin is given to patients for a few weeks, the bacilli develop resistance to it and grow in its presence, (2) para-amino salyclic acid given alone will likewise produce resistance in the bacilli of the patient so treated and this also in a few weeks, (3) finally, isoniazid leads to the same sort of result. But if any two of the drugs are given together, the bacillus is greatly delayed in adapting itself to its new environment and, thus, will require many months to become resistant to either. This allows prolonged effect of the drugs. Indeed, it is again well known that in many instances patients are allowed to profit by drug treatment for much longer than a year. Streptomycin, injected intramuscularly, is practically as effective when given twice a week as when given daily, and extensive experience has indicated that for the average patient weighing 90 to 125 pounds 1 gram of streptomycin intramuscularly twice a week plus 12 grams of PAS daily represents a most practical combination. The dose of streptomycin may vary by quarter grams with each variation of 25 pounds in body weight.

Streptomycin and its prominent derivative, dihydrostreptomycin, both produce toxic symptoms when the dose is large, but these are slight with the smaller doses in current use. In fact when these drugs first came into use it was the fashion to relate them to the three Ds—dizziness, deafness or death. Occasionally, itching and burning of the skin appears. If this is marked, or if it increases, the drug should be discontinued for one or two weeks and then resumed, the first several doses being 0.1 to 0.5 gm. These symptoms sometimes presage the development of full-blown exfoliative dermatitis. When toxic symptoms are bothersome from streptomycin, they may be met by change to dihydrostreptomycin or to INAH. There is some evidence which incriminates dihydrostreptomycin as affecting the auditory mechanism and streptomycin for its effect upon the vestibular apparatus. In the VA hospitals, streptomycin is seldom used except in the elderly whose vestibular system is especially likely to injury by streptomycin.

Isoniazid is the new member of the "big three."

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If the sodium salt of PAS is used, the average dose for an adult is 16 grams.

In doses of 3 or 4 mgm. per kilogram of body weight, or a range from 150 to 300 mgm. per day, this drug is very effective against tuberculosis. It has few contraindications but sometimes (1 to 4 per cent of cases) it may produce "nervousness," headache, insomnia and occasionally changes in personality or temperament. Several patients with epilepsy are thought to have had attacks incited by INAH and a few cases of psychosis have been reported from its use. Such effects are so uncommon as to be relatively unimportant when compared with the benefits derived from the use of the drug.

It is well known that para-amino salicylic acid is a much less potent antituberculosis drug than either of the others named. It has a certain degree of therapeutic virtue in its own right, but its great value lies, as stated, in its use in combination with streptomycin or dihydrostreptomycin or INAH to delay development of resistance to these drugs. Except for an occasional instance of sensitization or allergy, the drug is relatively harmless, but it is disagreeable to take and may produce nausea, vomiting and, not uncommonly, diarrhea, —but seldom to a point requiring discontinuation.

There are numerous other less effective drugs which may be used when, through resistance, sensitization or other causes, use of the major drugs has to be discontinued. Again advice from the VA conferences is that viomycin deserves a try in such circumstances and that terramycin, even in small doses, suffices to replace PAS in delaying the development of resistance to its companion drug.

In practice, therefore, it appears that streptomycin (1 gm. 2x week) plus PAS (12 gms. daily) or INAH (150 to 300 mgm. daily) plus PAS (12 gms. daily) constitute the most acceptable regimens. Streptomycin and INAH are used together by some, but many clinicians prefer to hold one of these against later need, such as loss of sensitivity. Experience of nearly all workers indicate that it is better to give the drugs continuously rather than in "courses" or in broken or intermittent application.

At times regimens must vary from the so-called standard, depending upon individual circumstances, and clinical skill must be the determining factor. Results in general, however, are fairly uniform and are characterized by (1) early sense of betterment on part of the patient; (2) early lessening of cough and reduction in volume of sputum and usually thinning of the latter; (3) improvement or clearing in the lesion as shown in x-ray so that within three or four months much of the fresher, scattered (and, by implication, noncaseous) lesion has undergone considerable resorption, by six or eight months the clearing has become maximal in 75 to 85 per cent of cases so that serial films remain relatively unchanged; (4) closure of cavities in better than one-half of the patients and (5) loss of tubercle bacilli from the sputum within six months in about three-fourths of the patients treated.

It is assumed that cavity closure is brought about largely through the healing effect of drugs upon the lesions in the bronchus leading to the cavity and to a lesser degree from resolution of the granulation tissue making up the cavity wall. Those cavities that remain after six months of proper drug therapy are likely to remain open and to require collapse or resection. In this connection it is possible that enthusiasm for the new and easy treatment by drug has caused us to give up collapse measures to a degree that is unwarranted, at least in many instances.

Recent work by Johnsen and Hewitt[2] has emphasized the rather frequent replacement of cavity or emergence of the latter into larger, cyst-like space with thin, fibrous wall which, on histological examination, may show only fibrosis or fibrosis in which is scattered a few remaining areas of caseous tissue. Such areas in several patients have continued without sign or symptom. A few have been the site of exacerbation with contraction and thickening of the wall, signs of active disease and return of bacilli to the sputum. Of the comparatively few removed by resection, the disease seems, in general, to have been arrested, and the patient has done well.

The effect on tubercle bacilli in the sputum is satisfactory because 70 to 80 per cent of patients become negative—even on culture—after taking the drug continuously for from four to six months, and this often without corresponding closure of cavities. In the latter, however, bacilli will frequently return eventually and will be resistant to the drugs.

This rather characteristic closure of cavities and loss of bacilli from the sputum obviously means that the drugs may now be thought of as definitive, that is, drugs, when added to the bedrest regimen, may lead to recovery in possibly half the cases

without the intervention of collapse measures or resectional surgery, unless one elects to remove the residual of the main or cavitary focus prophylactically, as many do. For the remainder, resection following stabilization of the lesion is practiced where practicable, which may mean about one-third or one-half of these less promising cases.

In tuberculous meningitis, the situation has been largely clarified and standardized. In general all three of these drugs tend to be used simultaneously in this form of the disease, at least for the first several weeks. The need of this may be questioned, however. Earlier, streptomycin was applied intrathecally which led to considerable irritation and, in the opinion of many observers, deafness. This method of administration has now been discontinued because good results follow the intramuscular method.

Meningitis, long a universal killer, is now subject to recovery in more than half of the cases, and experience teaches us that prolonged chemotherapy in excess of two years prevents deaths from recurrence which featured the earlier efforts at treatment with drugs. INAH has reached the point of a "must" in the treatment of meningitis (along with streptomycin), for results are distinctly superior when this drug is employed. Indeed in the experience of those in several clinics, no case of meningitis has died since this drug became one of those used in the treatment. A significant feature about this disease is its progressive diminution in occurrence since tuberculosis in general is under better control. Practically the same considerations hold for miliary tuberculosis, both in treatment and result.

Other forms of non-pulmonary tuberculosis have undergone corresponding improvement in outcome during the chemotherapeutic era. Renal and other forms of genitourinary disease resolve quite commonly under drugs so that resection, although needed at times, occurs distinctly less frequently than was formerly the case. And so also with orthopedic tuberculosis. Complications like laryngitis and enteritis present themselves infrequently, and fistula-in-ano occurs less often. Rarely do lesions of the cervical lymph nodes or of the skin appear. And so also for peritonitis and the wide range of other complications formerly encountered occasionally.

Thus may be chronicled a story of marked progress; of great improvement; of large numbers of recovered patients and correspondingly fewer deaths and of great reduction in the incidence of the disease. But two things stand out boldly in the changing picture. The first is that this improvement has occurred almost wholly in patients in the sanatorium on a program of bedrest and, secondly, that, although the death rate has dropped and the incidence of recovery has raised, the incidence of new cases declines very slowly and stands out as a continuing challenge.

The coming of effective chemotherapy for this disease has introduced a revolution in treatment and has led to a marked change in the philosophy toward the disease and many of the concepts as to its nature. It has brought into question some of the methods and techniques long hallowed in the sanatorium and has caused some to challenge basic bedrest and sanatorium care, for which they would substitute home treatment. This latter approach is simple; it appeals mightily to the patient, and it would save money, but facts indicate strongly that *in the institution* (1) drug therapy is more regularly and effectively carried out; (2) the occasional drug reaction is more satisfactorily treated; (3) the patient can be followed and evaluated better by medical oversight, x-ray and laboratory study; (4) timing of surgical intervention can be more effective; (5) the patient can learn better the value and practice of rest and (6) very important, the family and contacts are far safer. Perusal of Picks[3] discussion of the bases and logic of bed rest will indicate the reasons for this type of treatment and why its terms can best be met in the institution.

As a result of modern treatment, many more patients will return to the family physician from the sanatoriums than ever before and large numbers of these will continue chemotherapy and will thus challenge the doctor to renew his interest in this disease. Drugs have made resectional surgery possible and this has saved additional lives, but the operation seldom, if ever, shortens the patient's stay in the hospital.

It may be justified now to think in terms of actual eradication of the disease from the human body. If this is to be realized, every bit of evidence indicates the need to employ all the methods of therapy available. This would include bedrest and all the better features of life in the sanatorium, intelligent use of drugs and extensive application of surgical procedure under conditions of optimal timing.

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Tuberculosis Diagnosis and the Family Physician

By John R. Rodger, M.D.
Bellaire, Michigan

THE FAMILY physician has a two-fold responsibility in the diagnosis of tuberculosis. First, he must find the patient. Second, he must help prepare the patient mentally and emotionally for admission to a sanatorium for treatment.

Remembering to have a high index of suspicion is without doubt the most important factor in diagnosis. We strive to maintain a similarily sensitive suspicion when it comes to disease conditions like cancer, diabetes, early heart disease, et cetera, so we are merely transferring the Sherlock Holmes—or Perry Mason!—attitude towards the disease of tuberculosis. The fact that there is less tuberculosis to find as compared to many of the other more common diseases merely makes the problem more intriguing. A comparison in Michigan of new case figures to physician population per county shows that over the last four years the average physician, whether he be family physician or specialist, has found only one new case every one to three years. However, Michigan Tuberculosis Association leaders estimate that on the average there is another undetected case for each new case which we discover. Therefore an all-out detection program would undoubtedly uncover double the number of new cases for any one year. Instead of just discovering an average of one new case every one to three years, we should each be discovering one new case every six to eighteen *months*. Tuberculosis will never be defeated with only a .500 batting average!

We are all familiar with and undoubtedly would not often be tripped up by the typical picture of advanced tuberculosis, i.e., chronic cough, bloody sputum, fever, weakness and loss of weight. However, it is a sad commentary on our diagnostic acumen to learn that in our Michigan sanatoria, over half the admitted cases in the last five years were far advanced, and another third were moderately advanced. Many of the far advanced cases either have or are going to die, too many of the moderately advanced cases will also die. Each of these at one time was an early case which in all likelihood could have been cured. Most of this total of 84 per cent were open cases. For how many new cases were they responsible?. We cannot be proud of our diagnostic ability until these figures are reversed, and the far advanced cases make up the smaller percentage.

Whom should we suspect of early tuberculosis? In the adolescent and adult group we should be suspicious of the patient who complains of chronic fatigue, or whose secondary anemia apparently has no known cause, or who has a slight cough of long history which we too lightly may brush off as "smoker's cough," or "chronic bronchitis." We should remember that one of the largest reservoirs of undetected tuberculosis is the older person with a chronic cough. We should be particularily suspicious of the diabetic who should be doing well but isn't. We should inquire into the family history of tuberculosis, not forgetting the elderly person living at one time in contact with the patient, and who may have gone to the grave with an undiagnosed chronic cough.

We should be as free in prescribing chest x-rays for patients with the above symptoms as we are in prescribing a gastrointestinal series for the patient with gastrointestinal complaints suggestive of neoplasm. Early detection is even more important for the tuberculosis patient and his family, since cancer is not contagious. Even as a gastrointestinal series is no better than the experienced radiologist who performs it, so a chest x-ray for tuberculosis is no better than the quality of the film and the experience of the man who interprets it. Does the technician who takes the plate do a good job? Or in spite of a good x-ray machine, are his films outdated, his solutions old, too warm or too cold, his cassettes dirty, or his washing technique inadequate?

What of the experience of the man interpreting the film? Unless he is seeing chest plates several times a week and has had good training, he can miss early tuberculosis just as readily as an inadequately trained man can miss an early malignancy of the stomach. Even the best-trained man may miss either occasionally, but the poorly-trained man will make many tragic errors. I will illustrate this with a true story which can now be told since all the principal actors are dead. A young man teaching in a rural school in Michigan developed a chronic cough. He went to a doctor who was a well-experienced family physician, but who rarely called for assistance in consultation. He took a chest plate of the teacher

and pronounced it negative after reading it himself, although expert help free for the asking was not over fifty miles away. The teacher went back to his school, but within a year was in a tuberculosis sanatorium. Within another year he was dead, and nearly all his former pupils had positive tuberculin reactions!

Let us realize that even the trained radiologist may not be able to make an accurate diagnosis of an early case without another x-ray in a few weeks. He will also be greatly helped by whatever assistance we can give him as to possible contacts, history of symptoms, tuberculin reaction, et cetera.

We also have a responsibility to our younger patients. As tuberculosis becomes relatively less frequent, the tuberculin reaction becomes relatively of much more importance. It is in the mass screening of school children by tuberculin testing that health departments can do a most effective job with the younger generation. Each health department may need the assistance of the family physician in performing these examinations. At least they warrant our oral support. Also in our own offices we can do tuberculin testing on our pre-school patients, and as a supplement to the school program when needed. The patch test is easily performed and as a screening measure meets no juvenile resistance. A questionably positive reaction should be checked by an intradermal test. Shortly the Michigan State Health Department Laboratories will have a one-dose tuberculin product available. All positive reactors, of course, should be x-rayed, and if negative for adult-type disease, should be re-rayed every six to twelve months until the child is twenty or more years of age. The importance of this safeguard should be explained to parents, along with nutritional and other health suggestions for the potentially tuberculous child. It goes without saying that we need to keep tuberculous meningitis and miliary tuberculosis in mind with this age group.

Case findings on the basis of known new cases should not be a job sloughed off on the Health Department if the new case is the family physician's own patient. His responsibility as the family's physician is not over until he can assure it that no other cases exist in any of its members or other intimate home associates. Such case-finding is much more productive of results than is mass screening from the standpoint of time and effort involved, and the family physician is the logical person to direct it for his own families. If he cannot do it himself, at least he can cooperate with the Health Department in so doing, and thus let the family know that the personal physician and the Health Department are working together for the family's safety.

Even tuberculin-reacting children may blaze the trail to the open adult case. In one Minnesota community a school tuberculin testing program indirectly led to two adult cases, one of whom was a 200-pound man who looked the picture of health! The physician should also emphasize to the family that it cannot be given a clean bill of health after only one survey. Tuberculin testing of the younger members, and chest x-rays for all the older members plus the tuberculin-positive children are procedures which should be repeated at least once after an interval of several months. Not all fresh cases will show up immediately after the removal of the open case from the home.

Once a new case has been discovered and arrangements have been started to have the patient hospitalized, the family physician's responsibility to his patient is still not over. We will assume that he has no desire to treat the patient at home, with the attending hazards of contagion, poor nursing, and problems of drug sensitivity and the development of resistant strains. When even the experts are still groping for the optimum in therapy, the rest of us had better keep hands off! This is especially true in Michigan, where we will soon have all the hospital beds we will need for tuberculosis treatment.

But we do have a responsibility in helping to prepare the patient mentally and emotionally for what is ahead of him. It is not fair to tell him glibly that in a few weeks or months he will be cured and home. Let's sit down with him and present the picture with no punches pulled, pointing out especially, if his is an early case, that he has an excellent chance of recovery, but that even though the new drugs may speed this up somewhat, it is still a time-consuming process and one which is safest and best if directed in a sanatorium.

Let's try to place ourselves in the patient's place and honestly tell him what we would want some one to tell us if we were in his shoes. Jane Adams once said, "That person is most cultured who can put himself in the places of the most other people." The person with newly-discovered

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Tuberculosis and You

By Albert E. Heustis, M.D.
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Lansing, Michigan

TUBERCULOSIS is, tangibly speaking, Michigan's most costly single physical disease.

Most Michigan communities spend more local tax money for tuberculosis hospitalization costs alone than they spend for all of the other disease prevention activities of their local health departments. It has been estimated, too, that the State of Michigan spends about thirty times as much for the treatment of tuberculosis as it does for all other tuberculosis control activities. This does not include the over $5,000,000 recently spent for the construction of tuberculosis hospitals.

This is important to us as taxpayers and citizens. This is also important to us as doctors of medicine.

Today, in spite of the fact that we have the lowest tuberculosis death rate in our history, we have more persons hospitalized for tuberculosis than ever before. Today, too, over two-thirds of those who enter a tuberculosis hospital have the disease in an advanced stage. Approximately one-third of all persons admitted to a tuberculosis hospital give a history of having been treated for tuberculosis before. That is, in one-third of the cases we are paying tax money to do the job a second time. In Michigan today we still find that approximately 15 per cent of persons who die with tuberculosis as a primary cause of death have never been reported as a case of the disease.

As doctors of medicine, ours is the opportunity to provide leadership in tuberculosis control activities. Ours, too, is the opportunity to provide sound advice to those who are in legislative bodies so that our tax dollars may be invested in long-range protection from tuberculosis and not just spent on temporary or expedient relief.

There are a number of things which we as physicians can do to improve this situation.

First of all, we can think of the possibility of tuberculosis in our patients. At the present time the disease is most common in men over 45 years of age and in young married women between the ages of 25 and 45 years.

Secondly, we can realize that early tuberculosis is detectable only by means of a chest x-ray. We should also remember that the one group in which routine tuberculosis casefinding is most productive is the group entering general hospitals for one reason or another.

Thirdly, we must realize that in spite of all modern advances, the treatment of choice of all active tuberculosis is first and foremost a period of treatment in an approved tuberculosis hospital.

In these things there is an opportunity for the physician to put service to one's community above self and actively join hands with others in an effort to wipe out tuberculosis for all practical purposes.

In the program recently authorized by our state Legislature which had the full support of the Michigan State Medical Society, casefinding by the mobile type screening x-ray units will be stepped up. In addition, a closer follow-up will be made of all those who have come in contact with a case of active tuberculosis. Follow up 14 inch by 17 inch chest films will be made available to those in isolated communities. An attempt will be made to find out why patients leave hospitals prematurely and against medical advice, and to cut down on the number so doing. Finally, local health departments will be encouraged and assisted financially in the carrying out of special tuberculosis control projects.

The Michigan Department of Health appreciates the support and help which it has received from the members of the Tuberculosis Control Committee of the Michigan State Medical Society and the many additional individual doctors of medicine.

It is this fine working together in the public interest of those doctors of medicine whose specialty is public health with the other doctors of medicine in private practice that has helped us as a state to achieve our past accomplishments and offers us the greatest hope of continued success in future projects.

Anaphylactic Pneumonia

A Camouflage of Incipient Asthma

By George L. Waldbott, M.D.
Detroit, Michigan

IF an animal survives anaphylactic shock following an injection of antigen, so-called "protracted shock," occurs. Its principal feature is a "sterile anaphylactic pneumonia." This is either a lobar or an interstitial process with hemorrhagic infarctions of various sizes, alveolar edema and inflammatory lesions. It can be produced in guinea pigs sensitized to horse serum upon insufflation of horse serum into the trachea.

The equivalent of this condition in men was first described by Waldbott[3] in 1934, in connection with studies on what was then called "thymic death." It was demonstrated that this latter condition actually represented human anaphylactic shock because the autopsy findings were identical with shock following injections of horse serum.

In seven out of thirty-four autopsied cases, a pneumonitis developed several hours after the onset of shock. At that time it was difficult to present conclusive evidence of what is now generally accepted, namely, that human anaphylactic shock can occur by modes other than injections and by antigens other than protein. In the cases described, the antigen had obviously entered the system through inhalation, through the intestinal tract; thermic stimuli and anesthetics were also held responsible. The majority of the individuals were children. Some presented an allergic family history whereas others had no family background of allergy whatsoever. Most patients had been in perfect health previous to the onset.

In 1940, Rich and Gregory[2] described in patients who died from sensitivity to sulfapyridin, a condition which they termed "anaphylactic pneumonia." Their observations appear to be identical with the autopsy findings noted by Waldbott in 1934 in connection with so-called "thymic death."

Manifestations

I have had occasion to observe many additional cases with pneumonitis which evidently originated on the basis of anaphylactic shock. Clinically, this condition is distinct from any other type of pulmonary infiltration: It occurs in individuals who have not had asthma before. It is characterized by a prodromal stage of shock without fever lasting from two to ten hours; the subsequent febrile stage is mild, its duration less than five days; the temperature rarely exceeds 103 degrees.

The climax of "anaphylactic pneumonia" occurs at the onset. The patient is seized suddenly with marked dyspnea, cyanosis and collapse. This is accompanied by a suffocating cough and sometimes by laryngeal spasm. The pulse is fast, the blood pressure low. Some individuals have severe vomiting and diarrhea; in a few, urticaria is present. The outbreak cannot always be identified with a certain cause. A forty-seven-year-old man collapsed suddenly while entering a pigeon coop to feed his pigeons; a year-old infant while drinking a bottle of milk; a six-year-old boy while taking his first pony ride. One patient sensitive to cold temperature was seized while entering the cold water of a shallow lake in mid-summer.

Needless to say, this condition is often fatal. If the patient survives, examination reveals evidence of pulmonary edema, such as bronchial breathing and rales; consolidation soon ensues which can be visualized by x-ray. The leukocyte count is increased, but rarely exceeds 12000. There is no eosinophilia. Skin tests for the suspected antigens at this state of the disease are negative. If repeated several weeks later, they exhibit strongly positive reactions.

Once this condition has subsided, similar, less severe episodes tend to develop on subsequent occasions. A three-year-old child was hospitalized sixteen times within two years before true asthmatic attacks developed. The clinical picture was determined at first by shock, moisture in the lungs, and then the pneumonic process followed. In future episodes this pneumonia-like state becomes gradually displaced by wheezing, emphysema, and other signs of bronchial asthma such as allergic nasal disease, strongly positive intradermal skin reactions, and eosinophilia.

Pathology

The characteristic pathological changes of this condition are those which were first identified by me[1] in human anaphylaxis, namely, engorgement of pulmonary capillaries, extravasation of edema fluid through the capillary walls into the alveolar spaces and petechial hemorrhages in various parts of the lungs. In some areas there is tissue necrosis, in others traumatic emphysema alternating with atelectasis. Leukocytes can be seen immigrating into the edematous areas in an apparent attempt

to organize the lesions. The sections are sterile and contain no micro-organisms. Petechial hemorrhages and edema are also found in organs other than the lungs such as the pleura, pericardium, and the bowels. The adrenal glands are usually very small.

Incidence

It is difficult to estimate the incidence of "anaphylactic pneumonia" because the diagnosis often depends on the history which may not be sufficiently adequate for a statistical survey. Of 100 consecutive children with asthma, below six years of age, a pneumonic process preceded the onset of asthma in fifty-two. While a true infection probably prevailed in some of these cases, in a good proportion the history clearly pointed to a prodromal period of shock. There is a tendency among the profession to term these cases mistakenly "virus pneumonia."

Differential Diagnosis

There is no doubt that we are dealing with a clinical entity distinct from other types of pneumonitis and certainly distinct from pneumonitis which follows asthmatic attacks. It has been produced experimentally in animals; it has been observed following antigenic injections in men (Dean[1]) and it was noted by Rich and Gregory[2] in death from sensitization to sulfapyridin. We have seen it develop following non-fatal anaphylactic shock from penicillin injections. Furthermore, it is distinct from an allergic or so-called "constitutional" reaction which occurs in patients with an existing allergic disease following injections, inhalation, or ingestion of antigens to which extreme sensitivity exists. Here the "shock organ" is already in an altered state and has obviously already undergone changes which are evidently designed as a defense mechanism.

Significance

In my original description, the autopsy findings in the seven cases of pneumonitis were interpreted as a pre-allergic state or as protracted anaphylaxis. These patients had no previous allergic disease. If the individual survives he becomes, at first, subject to recurrent pneumonitis and later, to true asthmatic attacks. Therefore, the theory was advanced that, like in animal anaphylaxis, a patient sensitized to a certain antigen has not yet acquired the ability to localize and dispose of, the invading antigen like an asthmatic patient does. For instance, the mucous glands lining the bronchial wall are not yet hyperplastic as they are in advanced asthma; therefore, insufficient mucus is created to eliminate "invading" antigen. The bronchial musculature has not yet hypertrophied and bronchial contractions are not yet as intense as they are likely to be in asthma. The mucus, therefore, cannot be ejected from the bronchi as effectively as in the asthmatic. Furthermore, the patient cannot yet retain an injected antigen at the site of its injection by formation of a wheal as an asthmatic does when he exhibits a positive skin reaction. He cannot yet produce leukocytes and eosinophiles. Instead, there is hyperplasia of lymphoid tissue and necrosis in lymphoid organs. The adrenal glands are hypoplastic at autopsy. Waldbott and Anthony[4] demonstrated that enlargement of the thymus gland and of other lymphoid organs precedes the development of asthma. The relationship of lymphoid hyperplasia to insufficient production of adrenal cortical hormones is now well established.

Thus, the development of pneumonitis can be interpreted as a pre-allergic condition. Like in an anaphylactic animal, it is designed to repair the morbid changes of what is human anaphylaxis in the true sense of the word. It is not of infectious origin. It plays a part in the development of bronchial asthma and differs considerably from other types of pneumonia complicating allergic asthma.

Treatment

In view of this interpretation, the treatment of choice is the immediate administration of ACTH and Cortisone. Indeed, there is probably no more urgent need for the employment of these medications than in this disease. Small doses of epinephrine and other measures usually advocated to combat allergic edema, such as administration of potassium chloride and antihistaminics may be resorted to. Systematic desensitization with very small doses of a suspected antigen may be considered. Antibiotics are of little avail especially in the early state.

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Toward Closer Cooperation

As each new president takes office, the first thing he does (after shucking off his convention badges and the traditional presidential "horse collar") is to look about him and see if he can find fault with the MSMS. He searches for a loophole in the recognizedly well-rounded progressive program of his organization. If he finds one, a pleased smile spreads over his seamed and serried countenance, for he has found a basis for his *project* for the year.

It isn't easy.

I've studied and sorted, sought and searched. But I've found it! Eureka!

Here it is:

My project will be to weld the county medical societies and the MSMS into a closer union. Officers and committees of the MSMS are so active in carrying out such a myriad of deliberations and details that the business of relating these activities to the county medical societies is probably underplayed.

Often a single sentence in the annual reports covers months of activity and the doctor who reads that sentence loses the benefit of the constructive thinking and hard work that went into the accomplishment. And—on the other hand—the county medical society conducts a monumental campaign, succeeds in a program that has real significance to all of Medicine—and probably the only recognition received is a line in the JMSMS saying "congratulations."

Organized medicine is a warm, growing, active association of kindred spirits. I'd like to visit with every division of it and talk in the quiet confines of the county medical society meeting, of what's new—what's going on—what should go on. Maybe I can help "pass the word."

Your President is available to any county medical society in the State that would like him to chat with them.

Yes, your MSMS President is asking for it!

President's Message



Robert H. Baker

President, Michigan State Medical Society

Editorial

EDUCATIONAL PROGRAM NEEDS

THINGS are happening fast in the Tuberculosis field. The advances made in tuberculosis therapy over the past several years have been most encouraging, but in the interim, medical progress itself has created major problems. More effective drugs, supplemented by resectional surgery, have shortened the period of hospitalization for most of the tuberculous patients. As a direct result of this shortened hospital period it is expected there will be many empty beds in approved sanatoria in Michigan in 1954. This decreased load means an overall tax saving to the citizens of our State, but for the present it presents economic problems at the county sanatorium level.

These empty beds in our sanatoria emphasizes all the more the need for improved case-finding programs. Physicians generally recognize the challenge to seek out and hospitalize those undiagnosed individuals who continue to perpetuate tuberculosis in our general population. It is apparent that tuberculin testing is going to play a prominent part in our case-finding activities in the future. Your Tuberculosis Control Committee stresses its wider use by all practicing physicians of our state.

Once these patients are hospitalized, it must further be recognized that sputum conversion as of this date is not a reliable measuring stick. Many patients in Sanatoria today are pressing for a premature discharge that they may be permitted to continue drug therapy at home. This type of program needs careful scrutiny, and in most instances should be discouraged, for it could snowball into disaster. Bed rest is still essential, and sanatorium care is still the treatment of choice.

There has never been a greater need for a good educational program regarding tuberculosis. The public should be kept abreast of the problems created by medical progress. It will only be through the co-operation of the public and the medical profession as a whole, that the final fight against tuberculosis can be won.

JOHN W. TOWEY, M.D.
Chairman, Tuberculosis Control Committee, MSMS

OVERUTILIZATION

DURING THE annual meeting of the American Hospital Association in Chicago in September, 1954, the projected number of unnecessary days of hospitalization in Michigan was reported. This was interpreted by many as an actual figure. The actual number is not known. This estimate was made as a result of a study of 25 hospitals and the figure given was a guess that approximates the use of $40,000,000 worth of actual beds. The impression was bad. The problem of overutilization has been studied and explained to all of Michigan's doctors of medicine for the past two years. No one denies that patients get into the hospital mostly on a doctor's order and get out by the same method. The study from which the statements were made in Chicago were conducted to show what part the doctors of medicine had to play in overutilization of hospital beds. No other factors were considered in this report.

The hospital administrators are also at fault. They encourage more complete usage of their beds, and have been known to urge patients to stay an extra day. A couple of years ago we were told of a hospital which was operating in the red. The administrator told his staff that if they would, they could use the beds an extra day and his hospital would be benefitted. A few months later he reported operating in the black. This was not intended as an abuse, but a simple method of overcoming a small house count. It has also been noted that considerable overstay is connected with the week-end lag in the hospitals for laboratory studies.

Another factor contributing to overutilization is overselling the policy, that is giving the policy holder the impression by advertising or sales talk that the policy covers practically everything regardless of the limitations within the contract itself. This is a flagrant fault of all sales organizations in the field. Consumer misunderstanding. Many of our subscribers feel that because they have carried insurance for a long time, when there is a chance to use it, why not? It is their right! Many of us carry fire insurance on our homes. Most of us have never used that insurance. If we

are fully covered why not let the place burn? If we have the insurance why not use it? That is the same argument, but who would be so crazy?

Pressure groups are also at fault. They oversell their members, and many of them overuse the service especially when regular income is low and there are hospital and medical attention in the elective field which could be done while work is slack. These may also demand hospitalization for certain diagnostic services which are covered only in connection with other services. This work could be done in the doctor's office, but the hospital is more convenient.

Complete coverage is almost prohibitive in cost, as the automobile insurance world has found. It is practically impossible to buy. Our doctors and our subscribers should also be willing to bear the first burdens, or forego the unnecessary hospitalization in order to hold down our premium costs.

In the past fifteen years the rates of medical care have been raised only once by the Michigan Medical Service, but the premiums for Michigan Hospital Service have been increased every two or three years. The rate now is several times what it was. Overutilization is one of the reasons, but probably not the most important. Costs of living have practically doubled, and the costs of labor have more than doubled.

We as doctors of medicine admit a vital contact with this problem and are willing to meet our responsibilities. Abuse is not all ours and we hope for corrective action by hospitals, the public and Blue Cross itself. Within the contract itself, there should be provisions preventing temptation, and any liberalization of the contract should be free from this temptation.

Speakers with projected, not factual, figures (like those presented to the American Hospital Association) are entirely out of order. Such unauthorized presentation helps no one but tends to destroy public confidence in the service plans and point the accusing finger at the medical profession.

BEAUMONT MEMORIAL

THE BEAUMONT Memorial building has been finished, but the project is not yet complete. There are numerous items in furnishings, equipment, relics, colonial and frontier fixings to be accumulated. The expense to date has been met by contributions from the members of the Michigan State Medical Society, and advancements from the reserve of the society. Only about forty per cent of our members have sent in contributions, and that counts every member of some county societies which have funds available for use and which made donations in place of private subscriptions. Some estimated the amount required per man if everybody gave his share, and gave that amount.

We need about $15,000 more to complete the memorial as it should be done. The Beaumont Memorial Committee feels that its work is incomplete to date. We have established on Mackinac Island a very worthy shrine of the early days, a sample of French Colonial architecture, and a testimonial to medical research in its beginnings. There are more places on the Island which would make worthwhile projects and we have stimulated a trend. It is sincerely hoped that every one of our members who can will make his subscription, and have his name enrolled in the final accounting.

FAMILY TRENDS

THE NEW PRESIDENT of the Michigan State Medical Society recalls to some reminiscent minds the fact that Dr. Baker and his father is the fifth incidence of father and son who both have served as presidents of the Michigan State Medical Society.

C. M. Stockwell, M.D., Port Huron, was the first president in 1866; his son, Charles B. Stockwell, M.D., Port Huron, was president in 1906. Richard Inglis, M.D., Detroit, was president in 1869, and his son, David Inglis, M.D., Detroit, was president in 1905. Leartus Connor, M.D., Detroit, was president in 1909, and his son, Guy L. Connor, M.D., Detroit, was president in 1923. J. H. Carstens, M.D., Detroit, was president in 1909 and his son, Henry R. Carstens, M.D., Detroit, was president in 1941. Charles H. Baker, M.D., Bay City, was president in 1919, and his son Robert H., is now serving.

It is interesting that two of the present Council show the same family characteristic. George LeFevre, M.D., of Muskegon, was president in 1933, and his son, William M. LeFevre, M.D., of Muskegon, is councilor of the 11th District. William F. Breakey, M.D., of Ann Arbor, served as president in 1903 and his grandson, Robert S. Breakey, M.D., of Lansing, is now councilor of the 2nd District.

The editor has known every one of these men except Dr. C. M. Stockwell and Dr. Richard Inglis. His father was secretary of the Council for ten years accounting for many of these contacts.

THE ELECTIONS

President-for-a-Day

THE MICHIGAN State Medical Society has again honored one of its members for his many years of outstanding service and devotion to duty. The Society felt that a very special honor was due this worker in a manner which did not interrupt his present labors. L. Fernald Foster, M.D., of Bay City, secretary of the Michigan State Medical Society for eighteen years, and the very competent speaker for the Society on many occasions, has been honored by election as "President-For-A-Day."



This honor given by the Michigan State Medical Society is unique. It has been given before to Wilfrid Haughey, editor, and to Robert Novy, president of Michigan Medical Service. The recipients of this honor believe it is the highest and most outstanding testimony the Society can give.

L. (Louis) Fernald Foster was born in Phillipsburg, New Jersey, on October 10, 1891. He was graduated from the Phillipsburg High School in 1909, received a Ph.B. degree from Lafayette College in 1913, and received his M.D. from the University of Pennsylvania in 1918.

He was Resident physician at Presbyterian Hospital, Philadelphia, Resident and Chief Resident physician, Children's Hospital of Philadelphia, and did postgraduate work at the University of Pennsylvania and Washington University.

He is a licentiate of the National Board of Medical Examiners; diplomate of the American Board of Pediatrics; member American Academy of Pediatrics, and member American Medical Association, Michigan State Medical Society and Bay County Medical Society. Besides being secretary of the Michigan State Medical Society since 1936, he has served as secretary and treasurer of the Bay County Medical Society since 1920 with the exception of 1938 and 1939 when he was president-elect and president.

He is a member of Kappa Sigma Collegiate Fraternity, Alpha Kappa Kappa Medical Fraternity, and has been a director of Michigan Medical Service since 1941, director, Michigan Society for Crippled Children and Adults, secretary, Michigan Heart Association and member, Advisory Board of State Journal Advertising Bureau of the American Medical Association since 1942. He was in the Medical Reserve corps during World War I; a member and past president of Bay City Rotary Club, and a member of Masonic Bodies A.F.& A.M., R.A.M., Knights Templar and Elks.

Dr. Foster always jumps when he hears the fire alarm, and is an avid fire-fighter. He is Honorary Fire chief at Manistique, Michigan, is a member of the International Fire Chiefs Association, and is chairman of the Advisory committee to the Fire department in Bay City, Michigan.

He is a member of the American Legion, the Presbyterian Church, and is attending pediatrician at Mercy Hospital and at Bay City General Hospital.

In 1910 he married Kathryn M. Keller of Harrisburg, Pennsylvania, and they have two children, Phyllis Marcia (Mrs. John Murray) and L. Fernald Foster, Jr., A.B., M.S., who is a member of the faculty of Michigan State College.

The President

ROBERT H. BAKER, M.D., of Pontiac, Michigan, was installed as president at the Eighty-ninth Annual session of the M ichigan State Medical Society in Detroit, September 26 through October 1, 1954. Dr. Baker had served a year as President-Elect, completing many years of service. Dr. Baker was born April 10, 1892, in Bay City. His father was Charles H. Baker, one-time President of the Michigan State Medical Society.



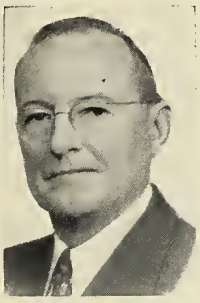
Dr. Baker graduated from the Bay City High School and entered the University of Michigan, where he received his A.B. degree in 1913, and M.D. in 1918. He served on Dr. Warthin's staff and was elected to Sigma Xi in his senior year. He served a rotating surgical internship at the University Hospital, and was demonstrator in surgery for a year. He was commissioned during World War I and served at the Army Medical School, graduating in orthopedics. After the war he returned to the University as instructor in surgery.

In 1920 he entered private practice in Pontiac. He served the Oakland County Medical Society

as secretary, treasurer, and president. Dr. Baker served for many years on the Council and the Executive Committee of the Michigan State Medical Society. He was a charter member of the Pontiac Kiwanis Club and the Torch Club. He is a life Fellow of The American College of Surgery, and served as delegate, vice-speaker, and four years as speaker of the Michigan House of Delegates. He is married and has two children, both married, and he has four grandchildren.



W. S. Jones, M.D.



J. T. P. Wickliffe, M.D.

The President-Elect

William S. Jones, M.D., of Menominee, was elected President-Elect at the Annual session of the Michigan State Medical Society in Detroit, September 26 through October 1, 1954. Dr. Jones was born in Jeffersonville, Georgia, June 19, 1890. He graduated with the degree of A.B. at the University of Georgia in 1911, and attended the University of Chicago, from which he was graduated in Medicine in 1915.

Dr. Jones interned in Presbyterian Hospital and Children's Hospital, Chicago, and entered private practice in Arizona until 1922. He then took a postgraduate course in Nose and Throat at the University of Pennsylvania, and a course in ophthalmology at Knapp's Memorial Hospital and in Vienna, after which he located in Menominee.

Dr. Jones is a member of the American Academy of Ophthalmology and Otolaryngology. He has served as secretary and as president of the Menominee County Medical Society and is on the staffs of St. Joseph-Lloyd Hospital, Menominee, and Marinette General Hospital, Marinette, Wisconsin.

Dr. Jones's son, W. S. Jones, Jr., M.D., is in practice with him. He was elected councilor for the 13th District in 1948, and has been chairman of the Finance committee of the Council for two years. Dr. Jones was largely instrumental in the research and work leading up to the setting up of the Health Insurance program which the State Medical Society has joined.

While attending college, Dr. Jones was a member of Sigma Chi fraternity and president of his junior class at University of Georgia. At Rush Medical College, University of Chicago; he was a member of Phi Beta Pi Medical Fraternity.

October 11, 1916, Dr. Jones married Edith Jackman of Menominee. They have three children, W. S., Jr., now associated with his father, Mrs. Mary Jones Higley of Menominee and Mrs. Elizabeth Jones Smith of Port Washington, Wisconsin. There are nine grandchildren.

Dr. Jones was vice president of the Lloyd Foundation, which built a seventy-two bed addition to the St. Joseph-Lloyd Hospital in Menominee. Dr. Jones is a diplomate of the American Board of Otolaryngology and is a member of the Wisconsin and Upper Peninsula Eye, Ear, Nose and Throat Society.

Councilor

The election of Dr. W. S. Jones as President-Elect created a vacancy for councilor of the 13th District, and John T. P. Wickliffe, M.D., of Calumet, was elected to serve out the unexpired term. Dr. Wickliffe was born in Wickliffe, Kentucky, in 1894. He attended the University of Kentucky one year, then transferred to the University of Louisville Medical School, graduating in 1918. He attended Surgical clinics in Vienna in 1936. He practiced in Lebanon from 1919 until 1924, and has been in Calumet, Michigan, since that time. He is past president of Houghton-Keweenaw-Baraga County Medical Society, a member of the Board of Education of the Calumet Public Schools since 1951 and a delegate to the Michigan State Medical Society for six years.

He has been married for thirty-five years and has a daughter and two sons who are Doctors of Medicine, University of Louisville, classes 1951 and 1952. One son is in practice with his father and the other is finishing a three-year residency in ophthalmology at Illinois Eye Infirmary in December, 1954.

OTHER ELECTIONS

B. M. Harris, M.D., of Ypsilanti was re-elected as councilor of the 14th District.

William Bromme, M.D., Detroit, was re-elected as councilor of the 18th District.



B. M. Harris, M.D.



Wm. Bromme, M.D.

The three delegates to the American Medical Association whose terms expire this year were re-elected: W. H. Huron, M.D., Iron Mountain; W. D. Barrett, M.D., Detroit, and Robt. L. Novy, M.D., Detroit. Alternate delegates to the American Medical Association were elected as follows: George W. Slagle, M.D., Battle Creek; C. I. Owen, M.D., Detroit, and John R. Rodger, M.D., Bellaire.

The new Council reorganized by re-electing William Bromme, M.D., Detroit, as chairman; H. B. Zemmer, M.D., Lapeer, as vice chairman; Ralph W. Shook, M.D., Kalamazoo, as chairman of the Finance committee; D. Bruce Wiley, M.D., Utica, chairman of the County Societies committee, and G. B. Saltonstall, M.D., Charlevoix, chairman of the Publications committee.

TUBERCULOSIS DIAGNOSIS AND THE FAMILY PHYSICIAN

(Continued from Page 1249)

tuberculosis needs just such a friend. Who can better meet his need than his personal, family physician? To whom will he listen with more avid hope concerning his own chances of recovery? (We can be wisely overoptimistic here as to the long-range outcome, for a patient who starts treatment emotionally defeated will be too easily defeated physically.) Who can better advise his family as to health safeguards, and even make suggestions as to their economic welfare? Even if the family physician cannot make practical suggestions here, the mere fact that he is interested and is one of the many coming to the family's support in its time of testing will be deeply appreciated, and will mark him as having a helping heart as well as a helping mind. This is one of the many times when we can each be a *family* physician in the deepest sense of that term. Perhaps by such preparation of the patient we can cut down on the numbers of those who later leave the sanatorium against medical advice. Last year in one Michigan tuberculosis hospital these "walk-aways" totalled 30 per cent of all discharged patients.

Summary

1. The family physician must keep alert a high index of suspicion in the matter of tuberculosis diagnosis, assisted by expertly read chest x-rays and active tuberculin testing.

2. Once a case is discovered in a family under his care, it is his responsibility to ferret out the contacts, either alone, or in co-operation with his Health Department.

3. His responsibility is unfinished until he has assisted in preparing the patient and his family psychologically for a sanatorium regime of treatment.

DRUG TREATMENT OF TUBERCULOSIS

(Continued from Page 1247)

Even in face of remarkable progress on every hand, new cases of tuberculosis continue to present themselves for treatment and additional ones are uncovered through mass surveys. The curve of new cases declines much less precipitately than that of the death rate. This presents the ever-challenging problem of adequate care to the physician and the public. The campaign against the disease has slackened in places where the death rate has been the only yardstick of progress. Where the physician and the community realize, however, that new cases continue to develop and demand attention, the attack upon the disease continues and often is intensified.

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1. D'Esopo, Nicholas: Chemotherapy of tuberculosis in man. J.A.M.A., 154:1954 (Jan. 2) 1952.
2. Johnsen, L. M. and Hewitt, W. C.: Cystlike cavities with isonazid therapy in pulmonary tuberculosis. Am. Rev. Tuberc., 69:1054 (June) 1954.
3. Peck, W. M.: The modalities of bed rest. U. S. Pub. Health Rep., 61:626 (May 3) 1946.

MICHIGAN CLINICAL INSTITUTE—1955

Sheraton-Cadillac Hotel, Detroit

Popular "Block System" Repeated

Time	Wednesday, March 9, 1955
A.M. 8:30	Registration Exhibits open
	SURGERY (INCLUDING GYNECOLOGY) AND TRAUMA
9:00	RALPH R. COOPER, M.D. WILLIAM S. CARPENTER, M.D. both of Detroit "Ulcerative Colitis"
9:30	CLYDE L. RANDALL, M.D. Buffalo, N. Y. (Title to be announced)
10:00	RICHARD H. MEADE, M.D. Grand Rapids "Traumatic Wet Lung"
10:10	INTERMISSION TO VIEW EXHIBITS
11:00 to 12:30	COLOR TV PROGRAM (Courtesy Smith, Kline & French Laboratories, Philadelphia)
11:00	THOMAS B. QUIGLEY, M.D. Boston, Mass. "The Use of Plaster of Paris in Common Injuries"
11:30	SYLVESTER J. O'CONNOR, M.D. Ann Arbor "Recognition and Early Management of Slipped Femoral Epiphysis"
11:50	Panel on "Open and Closed Fractures of the Tibia" CHARLES G. JOHNSTON, M.D., Detroit, Moderator ANDREW J. DAY, M.D., Detroit CURTIS M. HANSON, M.D., Kalamazoo DONALD F. KUDNER, M.D., Jackson
12:30	LUNCHEON
P.M 1:30	JOSEPH L. POSCH, M.D. Detroit "Treatment of the Injured Hand in Children"
1:50	ROBERT E. L. BERRY, M.D. Ann Arbor "Observations on the Fluid Needs of the Traumatized Elderly Patient"
2:10	JAMES W. RAE, M.D. Ann Arbor "Physical Therapy in Traumatic Conditions"
2:30	GEORGE M. WHEATLEY, M.D. New York City "Prevention of Accidental Trauma"
3:00	INTERMISSION TO VIEW EXHIBITS
	CANCER CONTROL
4:00	FREDERICK A. COLLER, M.D. Ann Arbor "Scrutiny of Progress Against Cancer"
4:30	ALEXANDER BRUNSCHWIG, M.D. New York, N. Y.
5:00	Discussion Conference (All Wednesday speakers invited to participate)

Time	Thursday, March 10, 1955
A.M. 8:30	Registration Exhibits open
	OBSTETRICS, PEDIATRICS AND INTERNAL MEDICINE DAY
9:00	CARL T. JAVERT, M.D. New York City "Program of Therapy for Repeated Abortion Patients"
9:30	HAROLD C. MACK, M.D. Detroit "The Plasma Proteins in Pregnancy—Some New Clues to Obstetric and Pediatric Pathology"
9:50	BRUCE GRAHAM, M.D. Ann Arbor "Use and Abuse of Fluid Therapy"
10:10	INTERMISSION TO VIEW EXHIBITS
11:00 to 12:30	COLOR TV PROGRAM (Courtesy Smith, Kline & French Laboratories, Philadelphia)
11:00	CARL E. BADGLEY, M.D. Ann Arbor "The Significance of the Retention of Fetal Positions"
11:20	(To be announced)
11:50	JAMES L. WILSON, M.D. Ann Arbor "Respiratory Diseases in Infancy"
P.M 12:10	ARTHUR E. HAMMOND, M.D. Detroit "Rehabilitation of Laryngectomies"
12:30	LUNCHEON
1:30	WILLIAM A. EVANS, JR., M.D. Detroit "Normal Variance in Pediatric Radiologic Examinations"
1:50	THOMAS FRANCIS, JR., M.D. Ann Arbor "Prospects for the Prevention of Polio"
2:10	WILLIAM H. BEIERWALTES, M.D. Ann Arbor "Radioactive Isotopes in your Practice Today"
2:30	THEODORE G. KLUMPP, M.D. New York City "The Pharmaceutical Manufacturers' Interest in the Practice of Medicine"
3:00	INTERMISSION TO VIEW EXHIBITS
4:00	WILLIAM DOCK, M.D. Brooklyn, New York "Atherosclerosis"
4:30	HANS SELYE, M.D. Montreal, Quebec "The Stress Syndrome"
5:15	Discussion Conference (All Thursday speakers invited to participate)

Time	Friday March 11, 1955
A.M. 8:30	Registration Exhibits open
	SIXTH ANNUAL MICHIGAN HEART DAY (Annual Meeting of Michigan Heart Association)
9:00	EUGENE B. FERRIS, M.D. Atlanta, Ga. "Hypertension"
9:30	NORMAN E. CLARKE, M.D. Detroit "Chemotherapy in Treatment of "Rheumatic Fever"
9:45	JOHN G. BIELAWSKI, M.D. Detroit "Cardiacs In Industry"
10:00	INTERMISSION TO VIEW EXHIBITS
11:00 to 12:30	COLOR TV PROGRAM (Courtesy Smith, Kline, & French Laboratories, Philadelphia) The television program will include an actual cardiac operation and demonstration of special pre-operative diagnostic studies.
12:30	LUNCHEON
	GENERAL MEDICINE
P.M 1:30	HOMER A. HOWES, M.D. Detroit "The Present Day Concepts of the Use of Cortisone, Hydrocortisone, and ACTH in the Treatment of Allergic Diseases"
1:50	ALBERT C. FURSTENBERG, M.D. Ann Arbor "The Diagnosis and Treatment of Vertigo"
2:10	F. BRUCE FRALICK, M.D. Ann Arbor "Eye Changes in Systemic Disease"
2:30	WILLIAM B. HILDEBRAND, M.D. Menasha, Wisconsin "What's New in Office Management"
3:00	FINAL INTERMISSION TO VIEW EXHIBITS
3:30	LEO H. BARTEMEIER, M.D. Detroit "Interpersonal Relations in the Practice of Medicine"
4:00	(Speaker to be announced)
4:30	GRAYSON L. CARROLL, M.D. St. Louis, Mo. "Treatment of Urinary Infections—The Effect of the Changing Flora in this Antibiotic Age"
5:00	Discussion Conference (All Friday speakers invited to participate)

PLAN TO ATTEND THIS SESSION

Let our numbers exceed all previous figures!

A. C. Kerlikowske, M. D.

A Modern Horatio Alger Story

"Kerly"—sometimes known more formally as A. C. Kerlikowske, M.D., of Ann Arbor—already has been immortalized by a number of newspaper writers. They have done well by him. In general, their theme has been: Michigan farm boy works up to the top of his profession; Director of University Hospital becomes President of the American College of Hospital Administrators.

That, of course, is true. But it seems to overshadow in a typically Horatio Alger fashion the obvious personal qualities which make the man what he is.



The writer is inclined to doubt the contribution of a fruit farm heritage or the sandy soil of Michigan's western shore as principal factors in Kerly's success as a hospital administrator. These are significant factors perhaps, but even more significant is the force of the man's personality itself. A force which no doubt would have flowered just as productively in the wastelands of Alaska or the swelter of a congested city tenement.

For example, listen in on a conversation which the writer overheard in the corridors of University Hospital several months ago: "Kerly thinks public relations is an oversold profession," said one of the hospital's assistant administrators. "He says he thinks it's wrong to pay people to improve relations with the public."

A second administrative assistant answered, "He's told me the same thing. He says that just as soon as you start paying people to be nice to other people, it isn't nice any more."

For such an attitude, Kerly deserves billing as "Mr. Public Relations Himself." He knows more about the art of public relations than many of the professionals in the field, and he has a simple credo to go on: "Everyone has a job to do, and everyone ought to find enjoyment in doing it."

With this philosophy from the top, it's come to the point where if you work at University Hospital and you aren't enjoying yourself, it is more likely your fault than someone's else. The tremendously successful employes' recreation program, including bowling, ceramics, golf, group singing, drama, skiing and dancing, are among the best evidence for calling Kerly "Mr. Public Relations Himself."

Of course he'll lay it all off to the energies and imagination of his staff members; but—without selling his staff short—Kerly is the inspiration.

Another Kerlikowske characteristic is the knack of catching people off guard. He doesn't like to embarrass people, but he likes less having them embarrass themselves by putting on airs.

It has been said that the University of Michigan — and University Hospital is no exception —is the best example of democratic chaos among academic institutions today. The philosophy seems to be: If you have to choose between efficiency and equity, equity is a better first choice. This means, of course, that there are more meetings, more staff conferences, more consultations per square inch of hall space than there are directives from the man on top.

It also means that the man on top is up there not by virtue of some mysterious power he has accumulated over people, but by virtue of his ability to inspire confidence on every rung of the organizational ladder.

Kerly not long ago was heard to say, "I'll work *with* every one of them, but I'll be damned if I'll work *for* any one of them."

This seeming bit of unsubtle philosophy wasn't a mere expression of pride. It was the heartfelt conviction of a man who not only possesses self-confidence but group-confidence as well. Kerly seemed to be saying, "If we can't work together

and get something done, there are others who can."

Thirty years of service to the University and leadership over some 2,500 hospital employes have proved Kerly's point. It would be a mistake, however, to think of Kerly as all candor and no heart. Because it isn't true.

This author has never seen or heard Kerly refuse to talk to a single person with a problem, up and down the line of a huge hospital's administrative hierarchy. He'd rather duck the whole problem of protocol by sneaking off to Mexico for a couple of weeks' vacation. That way he doesn't alienate the big ones, nor hurt the little ones.

"Some nights," he said recently, "I go home by the rear exit." If he didn't, it would take him an hour to make the distance between his desk and his car.

The writer asked Carolyn, Kerly's daughter who teaches in the Hospital School, to provide some insights into her father's character. It was almost as if the flood gates had been opened; Carolyn talked about her dad in torrents, always discreetly but always enthusiastically.

"Dad comes from a strong-willed, hardy stock. He has strong opinions. He loves the outdoors. He has a natural fondnesss for people, but he has had to learn to tolerate their differences. When he deals with individuals, he relies on instinct; when he has to handle difficult group problems, experience and education back him up."

Asked to list her father's interests, Carolyn replied:

"He has had only three until recently. First and foremost is his wife. Then his grandsons. Finally, his job."

"Recently" means that Kerly has expanded. He now lives in the country in a fine, new house on eight acres. He has, in a good sense, gotten back to the soil of his youth.

That's not particularly corny, when one knows that Kerly, despite his remarkable success with people running one of the country's outstanding educational hospitals, feels most at home with his hands either on a tractor or in the ground planting seedlings.

What more can be said? Only this:

The Norwegian, Knut Hamsun, wrote a classic called, "Growth of the Soil." The central figure is Isak, who is described in the early pages as, "a born carrier of loads, a lumbering barge of a man in the forest—oh, as if he loved his calling, tramping long roads and carrying heavy burdens; as if life without a load upon one's shoulders were a miserable thing, no life for him."

To me, Dr. Kerlikowske is a sort of Isak, turned the Grover Whalen of hospital administration over the years.

—Louis Graff

WORLD-WIDE IMMUNIZATION SCHEDULED FOR AMERICAN TROOPS

Army troops throughout the world will be immunized against influenza in accordance with a new tri-service policy, it was announced today by Major General George E. Armstrong, Army Surgeon General.

All Army troops will be administered the vaccine prior to a November 15 deadline before the onset of the usual winter respiratory diseases. Troops entering the Army after November 15 will be given the vaccine as soon as possible after induction, according to the announcement.

The new policy regarding immunization against influenza has been agreed upon by the Surgeons General of the Army, Navy and Air Force.

Last year, only Army troops in overseas commands were given vaccine for influenza. In years before, Army-wide immunization was administered after the first cases of the respiratory disease were detected and identified. Using this system, it was not always possible to provide vaccine to protect all troops before the beginning of the season.

But this year, according to General Armstrong, the Army will immunize all troops before the first outbreaks using a modified vaccine incorporating a recently isolated virus strain.

"Experience has shown," said General Armstrong, "that effective individual and group protection afforded by immunization with influenza vaccine can be expected only when the vaccine is given in advance of the usual respiratory disease season."

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

CANCER AND HEART DISEASE CONTROL PROJECTS

Three special projects in cancer and heart disease control are under way in the state, financed from federal funds allocated for work in these diseases. The three projects, locally planned as are those in the expanded tuberculosis control program, are designed to study and demonstrate methods of finding early cases and to furnish data that will make possible better evaluation of the overall problems.

In the city of Detroit, services of the Receiving Hospital Tumor clinic have been expanded to include a comprehensive medical social service program. The grant assists in the employment of a medical social worker and two clerical workers.

In St. Joseph County, screening tests for cervical carcinoma will be organized and demonstrated through joint action of the health department, the personal physician and the laboratory.

Wayne County will have the services of a qualified public health nurse to organize and demonstrate public health nursing services related to cancer and heart disease.

FIVE TB PROJECTS ADDED TO LIST

Five additional local projects have been added to the list of those already approved and in operation in the expanded TB control program.

A tuberculin testing program and the services of a project co-ordinator for the chest x-ray survey have been made possible in the Copper Country.

Assistance in the employment of a project co-ordinator for the x-ray survey has been given in Mason-Manistee Counties.

An addition to the previously announced Wayne County project is assistance toward employment of a public health nurse to expedite follow-up activities.

A lay epidemiologist will be added to the staff of the Grand Rapids Health Department to work toward improvement of the overall tuberculosis control program. This is in addition to the previously announced project.

Tuberculin testing as part of the community-wide chest x-ray survey will be carried on in Shiawassee County, with expanded follow-up services.

SUMMER TOPICAL FLUORIDE PROGRAM BENEFITS 24,500 CHILDREN

The department's summer program of topical application of fluoride to the teeth of school and preschool children was carried on in co-operation with local groups in 37 counties with 158 treatment centers. The program, conducted by 12 dental students, 30 student hygienists and 5 graduate hygienists working under supervision of local dentists treated the teeth of approximately 24,500 children. Since children receive applications every third year, this means that the actual coverage for the summer program was between 65,000 and 70,000 children.

The summer program supplements those carried on during the school year. Topical application results in 40 per cent reduction in new dental decay and the procedure is an excellent introduction to dentistry for young children since it is painless and requires four visits to the dentist. It is a good educational experience for the parents, also since it brings to their attention any dental defects that may be present.

A program of topical application of fluoride is considered indicated in a community for about six years after water fluoridation is initiated, to provide protection for those children whose teeth have been wholly or partially developed on nonfluoridated water. It is also indicated for rural areas where there is no municipal water supply.

HEARING AND VISION PROGRAMS UNDER WAY

With the opening of schools, the department's five hearing consultants and two vision consultants began work in communities throughout the state, helping local health departments, schools and co-operating groups to organize and carry on hearing and vision programs. Two sub-committees of the MSMS's Child Welfare Committee are in close touch with the programs, the sub-committee of opthalmologists and the sub-committee of otologists.

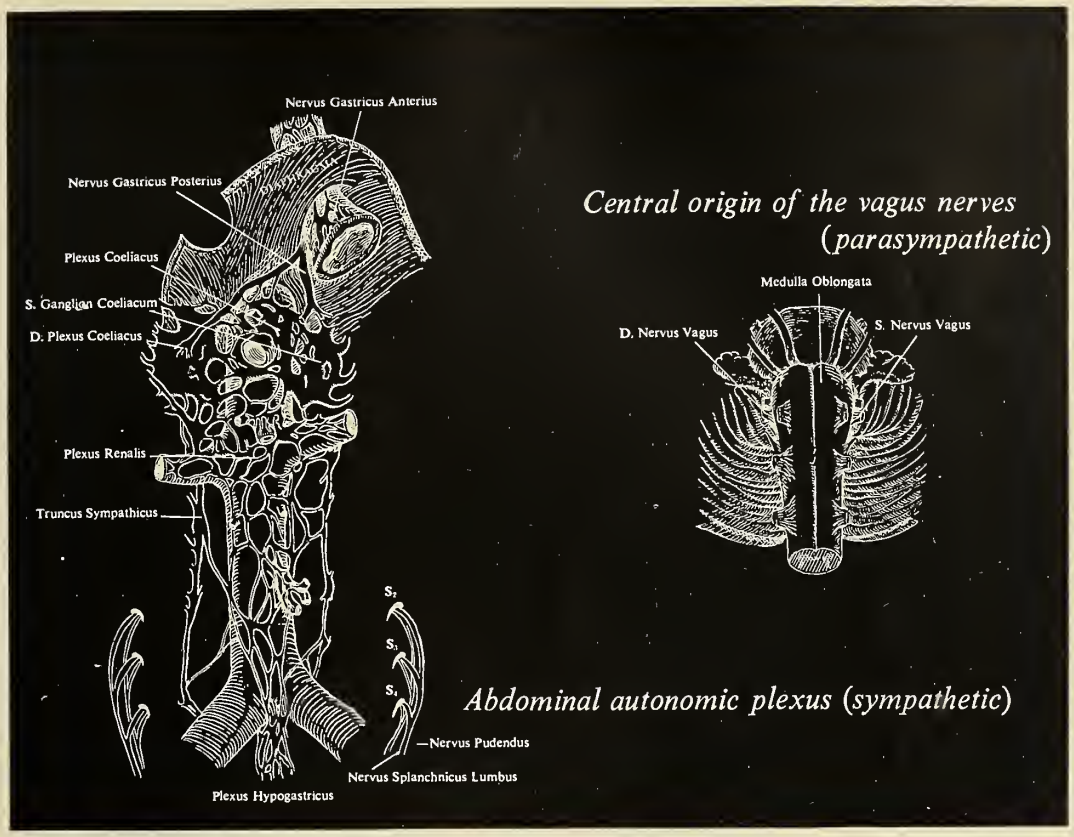
About 200,000 school children from kindergarten through high school are screened for hearing loss each year in group screening programs. Boys and girls showing any indication of a hearing loss are checked by one of the department consultants with a pure tone audiometer. Children singled out by this second check as needing further examination are referred to an otologist.

During the past year, approximately 2,000 children were examined in otology clinics sponsored by the Michigan Department of Health and the Michigan State Medical Society. About 75 practicing otologists have participated in the clinic program to date.

Experience in the eleven years that the hearing conservation program has been in operation has shown that about one-half of the hearing losses of school children can be corrected entirely. Twenty-five per cent of the rest can be helped medically, and if parents follow through on treatment recommendations, improvement can be expected in about 75 per cent of all cases.

ALPENA MULTIPLE SCREENING POPULAR

In the third multiple screening study, carried on in Alpena in September, of a possible 660 employes at the Besser Manufacturing Company, 600 or 91 per cent were screened and of a possible 1,084 employes at the Huron Cement Company, 814 or 75 per cent participated. Results are being tabulated and will be reported later.



Control of Gastric Motility and Spasticity in Peptic Ulcer with Banthine®

"The need[1] for suppressing gastric motility and spastic states is . . . fundamental in peptic ulcer therapy. Since the cholinergic nerves are motor and secretory to the stomach and motor to the intestines, agents capable of blocking cholinergic nerve stimulation are frequently used to lessen motor activity and hypermotility."

Banthine[2] "has dual effectiveness; it inhibits acetylcholine liberated at the postganglionic parasympathetic nerve endings and it blocks acetylcholine transmission through autonomic ganglia."

It has been shown[1] to diminish gastric motility and secretion significantly as well as intestinal and colonic motility.

The usual schedule of administration in peptic ulcer is 50 to 100 mg. every six hours, day and night, with subsequent adjustment to the patient's needs and tolerance. After the ulcer is healed, maintenance therapy, approximately half of the therapeutic dosage, should be continued for reasonable assurance of nonrecurrence.

Banthine® (brand of methantheline bromide) is supplied in: Banthine ampuls, 50 mg.—Banthine tablets, 50 mg.

It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. Searle Research in the Service of Medicine.

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1. Zupko, A. G.: Pharmacology and the General Practitioner, GP 7:55 (March) 1953.

2. McHardy, G. G., and Others: Clinical Evaluation of Methantheline (Banthine) Bromide in Gastroenterology, J.A.M.A. *147*:1620 (Dec. 22) 1951.



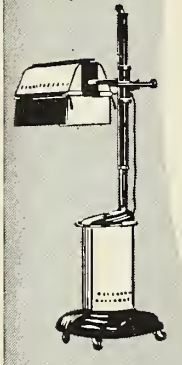
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Communications

Otto O. Beck, M.D., Chairman
MSMS Beaumont Memorial Committee
Birmingham, Michigan

Dear Dr. Beck:

I stopped last week in Mackinac to see the Beaumont Memorial and must congratulate you on a very worthwhile achievement.

The memorial to Beaumont as a medical pioneer is very interesting to a layman like myself and I think will add materially, year by year, to people's appreciation of the interest of their own state.

I was particularly pleased, however, from my own point of view, that there is now one historic building in the state of Michigan that shows what the French colonial style was. That is something unique in the story of Michigan and until you did this restoration, there was absolutely nothing in the state of Michigan, except our galleries, to represent the two centuries of French colonial life before the American immigration into the state.

I wonder what your plan is for the store? It would be interesting if you could furnish it, not on the model of an American country store, but as a fur trading post. I haven't seen the Hudson's Bay Museum at Winnipeg but there must be good precedence for furnishing a fur trading post in the old eighteenth century style. Probably the Hudson's Bay people would be interested to give advice, and I know we would be glad to help with the research that might need to be done.

But chiefly I wanted to say that it was a pleasure to see the restoration and to feel that we had some small part in such an admirable project.

Sincerely yours,
E. P. Richardson, Director
The Detroit Institute of Arts

September 14, 1954
Detroit 2, Michigan

Dr. Wilfrid Haughey, M.D., Editor
Journal of the Michigan State Medical Society
610 Post Building
Battle Creek, Michigan

Dear Doctor Haughey:

One year ago today I was the guest of honor of the Michigan State Medical Society at their Annual Gridiron Dinner in Grand Rapids. The memory of that occasion is still fresh and green and always will be.

Among the mementos of that unforgettable night, and now one of my most cherished possessions, is the Friendship Book presented to me at the dinner containing letters of good wishes from my many friends in the professions and the industry. Thanks to the efforts of our mutual friend, Bill Burns, and the Michigan State Medical Society, these written tributes were brought together in this valued Friendship Book.

I am writing you, now, because I want you to know that it has been my constant endeavor in the past year, as it will be in the years to come, to live up to the fine things that were written to me by my friends, of which you are a valued one. I am grateful to you for the inspiration which your expression of confidence has been to me, in my new work, as Secretary of this Association.

With my heartfelt thanks and all good wishes, I am

Sincerely yours,
Frank M. Rhatigan

September 24, 1954
Chicago, Illinois

(Continued on Page 1266)



Some Doctors want fine steel examining room equipment. They pick Hamilton, and are always pleased.

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This wonderfully complete line of examining room equipment gives you so many choices . . . all except one. There is no choice of quality. Every piece of it is Hamilton quality — and there is nothing finer.

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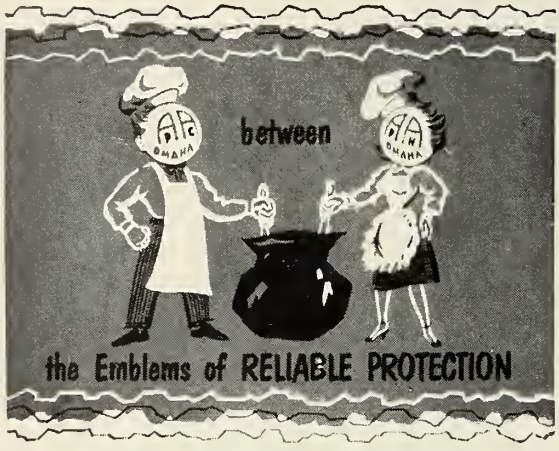
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PHYSICIANS AND HOSPITAL SUPPLIES

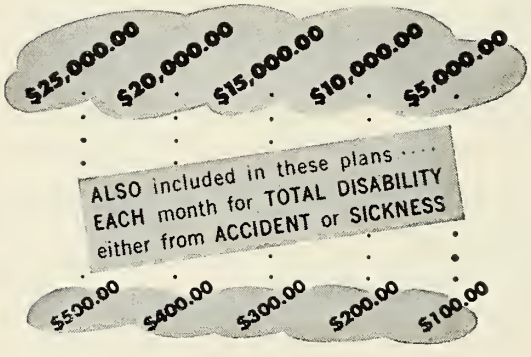
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Omaha 2, Nebraska

(Continued from Page 1264)

Wilfrid Haughey, M.D., Editor
Michigan State Medical Society Journal
610 Post Building
Battle Creek, Michigan

Dear Wilfrid:

We would greatly appreciate your publishing the attached notice in The Journal as soon as conveniently possible.

It has been brought to our attention that there are many residents in approved training hospitals in Michigan who hold a temporary license. They have written no State Board licensure examination, but rather are diplomates of the National Board of Medical Examiners and are laboring under a false sense of security that the certificate of the National Board will be acceptable as a basis for permanent licensure. In order that they do not miss out entirely, we wish the rejection of the National Board certificate by the Michigan Board brought to the attention of everyone concerned.

As in the past, we will greatly appreciate your assistance by publication of this information.

Sincerely yours,
J. Earl McIntyre, M.D.
Executive Secretary

September 29, 1954
Lansing, Michigan

* * *

Resolution:

Whereas, The actions of the National Board of Medical Examiners of the United States have been and are incompatible and in violation of Act No. 237, P.A. of 1899, and Acts amendatory thereto, the Medical Practice Laws of Michigan,

Be it resolved, That on and after November 1, 1954, the Michigan State Board of Registration in Medicine will not accept or endorse the Certificate of Examination of the National Board of Medical Examiners of the United States as a basis for registration and licensure to practice medicine in Michigan.

MICHIGAN STATE BOARD
OF REGISTRATION IN
MEDICINE
J. Earl McIntyre, M.D.
Executive Secretary

September 1, 1954
Lansing, Michigan

More than 900 chemicals have been shown to be carcinogenic for experimental animals.

* * *

There is much evidence that once a person has developed a cancer which is subsequently cured, he has a much greater chance of having a second primary cancer than one not previously so affected.

* * *

There is little or no correlation between the size of the primary lesion of malignant melanoma and the occurrence of metastases.

* * *

In a nevus undergoing malignant change, the earliest alterations occur in nevus cells at the junction of the epidermis and dermis.

* * *

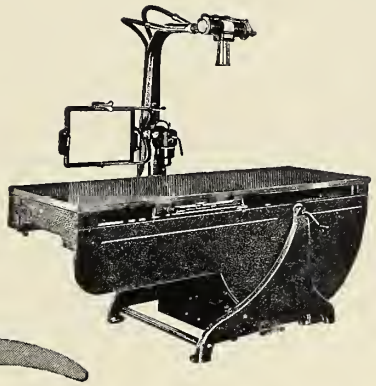
When a malignant melanoma develops before puberty, it rarely metastasizes and the outlook is excellent if it is excised.

* * *

Malignant melanoma is practically immune to roentgen therapy.



You don't get cut-off images like this when you're radiographing with a Picker "Century" . . . because centering the x-ray tube to body part to Bucky is *uniquely positive and accurate.* Nor are you in for a back-of-table struggle when you want to shift from radiography to fluoroscopy . . . you swing the single tube under the table while you stand easily in *front* of it.



Operational features like these (and dozens more) have won for this x-ray unit a measure of esteem so high that *there are more Picker "Century" 100 ma x-ray combinations in active use today than any other similar apparatus.*

P.S. If you prefer, you can *rent* a "Century" (or any other Picker apparatus) through our X-Ray Rental Plan. Ask your local Picker representative about it.

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In Memoriam

HARRY A. BARBOUR, M.D., of Mayville died May 13, 1954, on the fiftieth anniversary of his graduation from medical school. He was seventy-four years old.

Dr. Barbour, who was a Life member of MSMS, was the father of Fleming A. Barbour, M.D., of Flint, president of the Genesee County Medical Society.

The elder Dr. Barbour was born in Bristol, Indiana, and was graduated from the Detroit Homeopathic College of Medicine in 1904. He practiced in Bristol before moving to Michigan in 1912. Before opening his practice in Mayville in 1931, Dr. Barbour had practiced in Beaverton and Vassar.

In addition to his son, Fleming, Dr. Barbour is survived by his wife, Hartie Elizabeth; a son, Julius of East Lansing; a daughter, Mrs. Don Mawdesley of Mayville; a brother, a sister, and eight grandchildren.

LAWRENCE H. VAN BECELAERE, M.D., Health Commissioner in Ecorse for thirty years, died suddenly June 8, 1954, at his home. He was sixty years old.

Dr. Van Becelaere had served on the surgical staff at Wyandotte General Hospital for many years, and at one time was chief of staff there. During World War I, Dr. Van Becelaere served in the Army Medical Corps, and saw overseas duty in France. He was Past Commander of his local American Legion post.

Dr. Van Becelaere received his M.D. degree from the Detroit College of Medicine, now Wayne University College of Medicine. He was twenty-two years old at the time, having completed his high school and college work together.

His father, also a doctor of medicine, died in 1953 aged eighty-six. A son, Lawrence A. Van Becelaere, M.D., of Lincoln Park, practices in Detroit. A daughter, Mrs. James Rebbeck, Wyandotte, also survives.

MAHLON R. SUTTON, M.D., who spent more than thirty years with the Buick Motor Company, sixteen of them as medical director, died March 25, 1954, at the age of seventy-four. He was a Life Member of the Michigan State Medical Society.

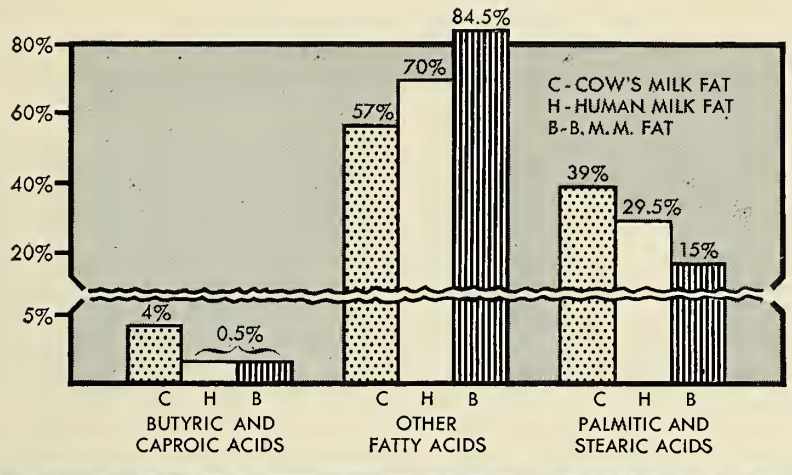
Dr. Sutton was born near Morenci, Michigan, and following his graduation from the Michigan College of Medicine and Surgery at Detroit in 1903, he practiced in his native community. In 1916, Dr. Sutton moved to Flint as assistant chief surgeon for Buick Motor Company. Moving through the ranks to the position of medical director, Dr. Sutton retired in 1948. Since then he had spent most of his time at Torch Lake in northern Michigan.

Dr. Sutton was recognized as one of the pioneers in industrial surgery, and contributed much to the development of the Buick Motor Company Hospital. He volunteered for service in World War I and was released with the rank of lieutenant colonel in 1918. He was a member of many organizations, professional and fraternal.

Dr. Sutton is survived by his wife, Mary; two sons, Mahlon, Jr., of Birmingham, and Harold of Flint; a daughter, Mrs. Elizabeth Sutton Peer, of Flint, and three grandchildren.

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. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

Martin J. Urist, M.D., South Haven, is the author of an article entitled "Surgery in Exophoria", published in the American Journal of Ophthalmology, August, 1954.

W. S. Reveno, M.D., Detroit, is the author of an article entitled "Gleanings—1954 American Goiter Association Meeting", published in Harper Hospital Bulletin, July-August, 1954.

Robert C. Moehlig, M.D., Detroit, is the author of an article entitled "Pitressin Tannate in Oil as a Hemostatic Agent In Gastrointestinal Bleeding", published in Harper Hospital Bulletin for July-August, 1954.

George Sewell, M.D., Detroit, is the author of an article entitled "Advantages of Retropubic Prostatectomy", published in Harper Hospital Bulletin, July-August, 1954.

Walter F. Anderson, M.D., is the author of an article entitled "Spinal Cord Regeneration: A Revised Concept Regarding the Use of Grafts", published in the July-August, 1954, issue of Harper Hospital Bulletin.

Paul L. Cusick, M.D., Detroit, is the author of an article entitled "A Goniotomy Knife", published in Transactions American Academy of Ophthalmology and Otolaryngology, July-August, 1954 and presented as a new instrument at the Fifty-Eighth Annual Session of the American Academy of Ophthalmology and Otolaryngology, Oct. 11-16, 1953, Chicago, Ill.

William J. Fry, M.D., Ann Arbor, is the author of an article entitled "Acute Renal Failure and Death Following Aortography: Report of a Case," published in the University of Michigan Medical Bulletin, August 1954.

Reuben L. Kahn, D.Sc., Ann Arbor, is the author of an article entitled "Tissue Immunity—Its Possible Relationship to Midline Facial Granulomatous Ulceration", published in University of Michigan Medical Bulletin, August, 1954.

John M. Hammer, M.D., Patrick H. Seay, Ph.D., Kalamazoo, and **Edward J. Hill, M.D.,** and **Frank W. Prust, M.D.,** Detroit, are the authors of an article entitled "Reinforcement of Vascular Grafts With Viable Intestinal Segments" read at the 11th Annual meeting of the Central Surgical Association, Detroit, Feb. 19, 1954, and published in the AMA Archives of Surgery, August 1954.

Duncan A. Cameron, M.D., Lincoln Park, Mich., **Henry A. Chapnick, M.D.,** and **Don W. McLean, M.D.,** Detroit, are the authors of an article entitled "Cancer of the Large Bowel", read at the 11th Annual meeting of the Central Surgical Association, Detroit, Feb. 19, 1954, and published in AMA Archives of Surgery, August 1954.

Herbert L. Davis, Ph.D., and **Merle M. Musselman, M.D.,** Eloise, are the authors of an article entitled "Blood Particle Agglomeration and Fat Embolism", presented January 9, 1954, Wayne University, Detroit, Symposium on Blood, and published in International Record of Medicine, August, 1954.

Ernest H. Watson, M.D., James L. Wilson, M.D., and **Arthur Tuuri, M.D.,** Ann Arbor, are the authors of an article entitled "Diaper Care In Nurseries" published in the Journal of the American Medical Association, August 28, 1954.

R. B. Johnson, M.D. and **W. W. Ackermann, M.D.,** Ann Arbor, are the authors of an article entitled "Intracellular Pattern of Nucleic Acid in Virus Infection" published in Proc. Soc. Exper. Biol. & Med., June, 1954.

V. E. Lepisto, M.D., Hancock, and **R. W. B. Holland, M.D.,** Shikarpur, Sind, Pakistan, are the authors of an article entitled "Cortisone and Neosone in Complications Following Cataract Surgery", published in American Journal of Ophthalmology, August, 1954.

James Poppy, M.D., Ann Arbor, is the author of an article entitled "The Inception of a Medical School: Academic Medicine Comes to Michigan", published in University of Michigan Medical Bulletin, August, 1954.

Alfred H. Whittaker, M.D., Detroit, is the author of an original article, "The Beaumont Memorial on Mackinac Island," published in the *Bulletin of the History of Medicine,* July-August, 1954, based on manuscript read at the 27th Annual Meeting of the American Association of the History of Medicine, New Haven, Connecticut, May 7, 1954.

Meyer O. Cantor, M.D., Detroit, is the author of an original article, "The Effect of Stature Upon the Point of Origin of the Inferior Mesenteric Artery," which was published in *Surgery,* July, 1954.

The Fifth Annual North Shore Health Resort Lecture series on "Treatment in Psychiatry—Part II" will be held on the first Wednesday of each month from October through June, except for October (second Wednesday) and May (moved up one week to the fourth Wednesday in April).

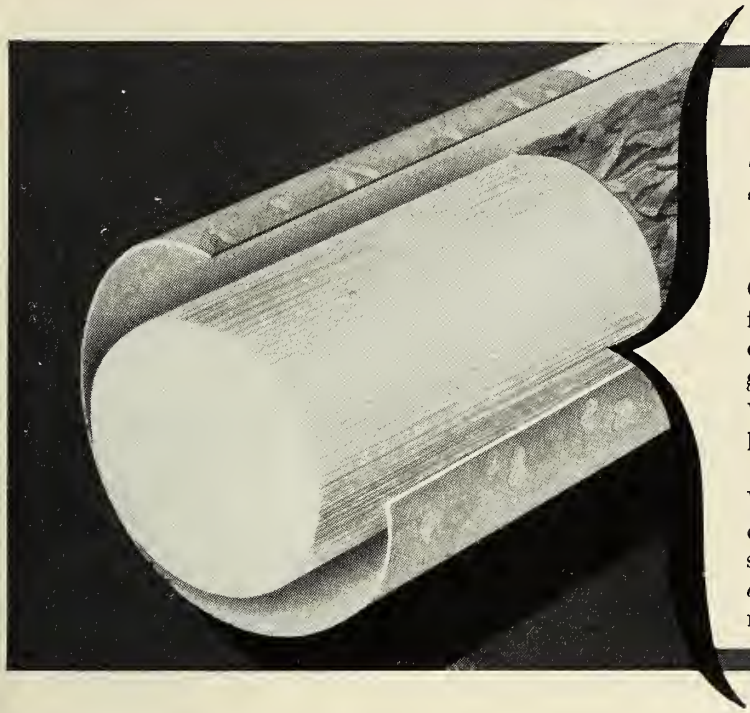
In this series of nine lectures, many outstanding men in the United States and Canada have agreed to participate, among them Raymond W. Waggoner, M.D., professor and chairman of the Department of Psychiatry, University of Michigan Medical School. Dr. Waggoner will speak on April 6, 1955, on the topic "The Value of Emotional Support and Environmental Manipulation."

No charge is made for these lectures. For further in-

(Continued on Page 1272)

DOCTOR, WHEN YOUR PATIENTS ASK...

What have VICEROYS got that other filter tip cigarettes haven't got?



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20,000 FILTERS

in Every Viceroy Tip

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New King-Size

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ONLY A PENNY OR TWO MORE THAN CIGARETTES WITHOUT FILTERS





(Continued from Page 1270)

formation you may write to Samuel Liebman, M.D., medical director, North Shore Health Resort, Winnetka, Illinois.

* * *

The ninth annual University of Florida Midwinter seminar in Ophthalmology and Otolaryngology will be held at the Sans Souci Hotel in Miami Beach the week of January 17, 1954. The lectures on ophthalmology will be presented on January 17-19, and those on otolaryngology on January 20-22. A midweek feature will be the Midwinter convention of the Florida Society of Ophthalmology and Otolaryngology on Wednesday afternoon, January 19, to which all registrants are invited. The registrants and their wives may also attend the informal banquet at 8 p.m., Wednesday. The seminar schedule permits ample time for recreation.

The Seminar lecturers on ophthalmology this year are: Dr. William F. Hughes, Jr., Chicago; Dr. Phillips Thygeson, San Jose; Dr. James Allen, New Orleans; Dr. Walter H. Fink, Minneapolis; and Dr. Milton L. Berliner, New York. Those lecturing on otolaryngology are: Dr. Paul Holinger, Chicago; Dr. Lawrence R. Boies, Minneapolis; Dr. Edmund P. Fowler, Jr., New York; Dr. Arthur W. Proetz, St. Louis, and Dr. David D. DeWeese, Portland, Oregon.

At the Nineteenth Annual meeting of the Mississippi Valley Medical Society, September 22-24, in Chicago, William Q. Wolfson, M.D., Detroit, delivered a paper entitled "Present Status of ACTH, Hydrocortisone and Cortisone—with particular Reference to Long-Term Treatment."

* * *

The American Board of Physical Medicine and Rehabilitation has announced that examinations for the American Board of Physical Medicine and Rehabilitation will be held in Philadelphia, June 5 and 6, 1955. The final date for filing applications is March 1, 1955. Applications for eligibility to the examinations should be mailed to the Secretary, Dr. Earl C. Elkins, 30 N. Michigan Avenue, Chicago 2, Illinois.

* * *

Lewis Cohen, M.D., Detroit, attended the meetings of the American Institute of Ultrasonics in Medicine and the American Association of Electromyography and Electrodiagnosis in Washington, D. C., September 4 and 5, 1954. Dr. Cohen is a founding member of the American Association of Electromyography and Electrodiagnosis.

* * *

On Tuesday, October 26, Bruce Proctor, M.D., Detroit, presented a paper entitled "Technique of Radical Neck Dissection" to the annual convention of the Indiana State Medical Society at Indianapolis. On the next day

(Continued on Page 1274)

ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

March 1, 2, 3, 4, 1955 • Palmer House, Chicago

DAILY HALF-HOUR LECTURES BY OUTSTANDING TEACHERS AND SPEAKERS on subjects of interest to both general practitioner and specialist.

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MEDICAL COLOR TELECASTS.

TEACHING DEMONSTRATIONS.

SCIENTIFIC EXHIBITS worthy of real study and helpful and time-saving **TECHNICAL EXHIBITS.**

The CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE should be a MUST on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.

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for the Convalescent and the Aging Patient

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*Lucia, S. P.: Wine as Food and Medicine, New York, The Blakiston Company, Inc., 1954.

**Research information on wine is available upon request.

(Continued from Page 1272)

he presented his paper to the Section of Ophthalmology and Otolaryngology of the Indiana Medical Society at their special session.

* * *

James T. Case, M.D., formerly of Battle Creek, Michigan, president of the American College of Radiology, will preside at the Fifth Inter-American Congress to be held in Washington, D. C., April 24-29, 1955.

* * *

Konrad Adenauer, chancellor of West Germany, has asked that six American Doctors of Medicine be sent over the first of January, 1955, to study the Medical and Health situation in Germany. The mission will take two months. Our own William A. Hyland, M.D., of Grand Rapids, former president of the Michigan State Medical Society, has been designated by the American Medical Association as one of the delegation.

* * *

Frank G. Dickinson, director, AMA Bureau of Medical Economic Research, says: "The chance that my daughter would not have survived the risks of pregnancy and childbirth last summer was one-ninth of the chance that my wife would not have survived when my daughter was born 25 years ago. I challenge any other profession or occupation to show as much progress as the medical profession during one generation."—*AMA Secretary's Letter.*

William M. LeFevre, M.D., Muskegon, councilor for the Eleventh District of the Michigan State Medical Society, has been selected as Governor for Michigan of the American Diabetes Society.

* * *

A. C. Furstenberg, M.D., Ann Arbor, dean of the University of Michigan School of Medicine, has been named President-Elect of the American Academy of Ophthalmology and Otolaryngology, at the recent meeting in New York City.

* * *

Edward F. Sladek, M.D., Traverse City a past president of the Michigan State Medical Society, is now Grand Medic of the American Legion's "Forty and Eight."

* * *

October 10 is an important date in the Defense department's program for staffing the military medical services after expiration of the Doctor Draft Act next July 1. By October 10 non-veteran interns are expected to have sent to the Pentagon their "Statements of Service Preference." On this form the interns will indicate 1-2-3 preferences among the services, whether they desire further deferment for residencies, and if so the type of residency and first and second choice of hospitals. The Department then will turn over the names to the three services for reserve commissioning, and decide by lot which interns will be deferred for residencies "in

(Continued on Page 1276)

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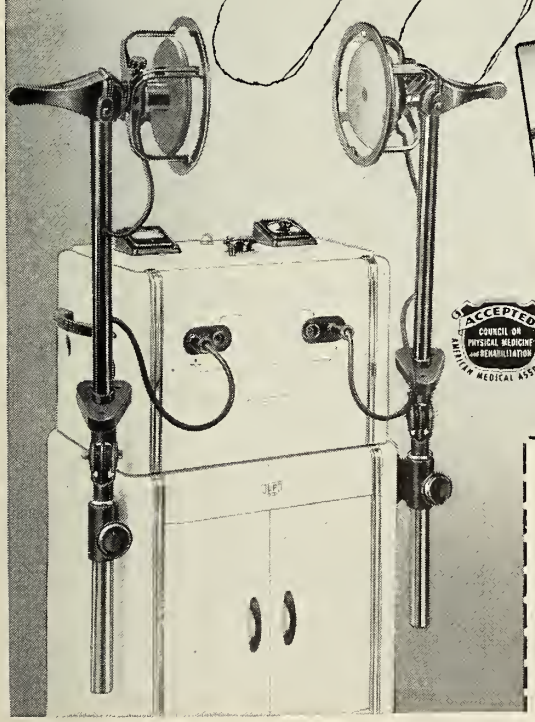
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(Continued from Page 1274)

specialties essential to the military medical services." So far as practicable, the plan is to allow these non-veteran interns—who have a two-year service obligation under the regular draft—to go on active duty at a time convenient to them following the completion of their internship next spring. Already the Defense Department has enough information to know that about half the interns will request residency deferments—and that no more than half of these requests can be granted.

The program is known as "The Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program." It is jointly sponsored by Defense Department and the National Selective Service System. The latter will recommend that local boards defer men selected by Defense Department for residency training.

* * *

As of September 1, Veterans Administration had only two service-connected cases awaiting hospitalization. At the same time 19,878 non-service cases had qualified for treatment and were awaiting hospitalization. For August, the average VA daily patient load was 109,450, compared with 105,486 in August of 1953.

* * *

The Fourth Annual meeting of American Medical Education foundation state chairmen will be held at the Sheraton Hotel in Chicago on Sunday, January 23, 1955. Specific details regarding the proposed program and reservation forms for accommodations at the Sheraton Hotel will be distributed with the November Bulletin to AMEF state chairmen and regional auxiliary chairmen.

* * *

John W. Hedback recently joined the staff of the American Medical Education Foundation in the capacity of associate executive secretary. Through many years of hospital public and community relations work, Mr. Hedback has gained valuable experience which will assist him in the development of state and local committees. The son of a physician, the late Axel E. Hedback, M.D., of Minneapolis, he has a keen interest in the problems of medical education.

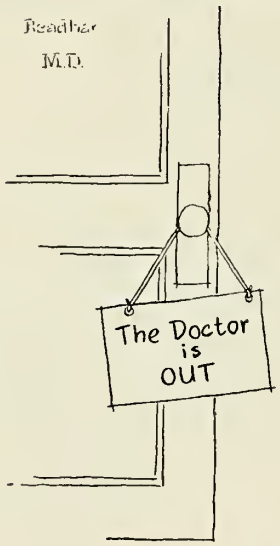
* * *

Although it is expected to pass the one million dollar mark in September, at this writing, the American Medical Education Foundation has received $995,000 from 14,800 donors. Our renewal appeal to physicians who contributed to the Foundation during the last six months of 1953 will be distributed this week and should increase our total considerably.

* * *

William C. Stronach, executive secretary of the American College of Radiology, recently forwarded a check in the amount of $2,000.00 representing a gift to the American Medical Education Foundation from the ACR. Since the inception of the Foundation in 1951, the American College of Radiology has supported the AMEF

(Continued on Page 1279)



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	Mild	*Moderate*	*Total*
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Dihydrostreptomycin	6	0	6
Distrycin	0	0	0

	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

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(Continued from Page 1276)

program and has received two Awards of Merit for outstanding contributions.

* * *

A two-day mental health conference of state and county medical society representatives—the first of its kind ever held—drew an attendance of 75 key people. The meeting, held in AMA headquarters in Chicago, was designed to bring about a closer working relationship between the psychiatrist and the general medical practitioner and other specialists.

Thirty-five state medical associations were represented at the meeting, most of them by chairmen of mental health committees. When the meeting ended, these representatives expressed a unanimous opinion that this type of session should be held each year.

Dr. Leo H. Bartemeier, Detroit, chairman of the AMA Committee on Mental Health and chairman of the meeting, stated at the opening session that "we hope to gather information helpful to at least 20 states which do not have mental health committees."

The conference rejected a proposal to make alcoholism a reportable disease. To do so, some doctors contended, would discourage alcoholics from seeking help of doctors because they would not want their names listed as alcoholics in public records.

Recommendations, however, included these: (a) establish committees on alcoholism in all medical societies, where feasible; (b) include proper teaching on alcoholism in medical and other professional schools, and provide postgraduate education on alcoholism in these fields; and (c) urge co-operative and other medical and hospital insurance plans to accept and treat alcoholism as a disease, and urge hospital authorities to accept persons for treatment as alcoholics.

* * *

Dr. L. W. Hull, president, Michigan State Medical Society, says: "In spite of much talk to the contrary, it is still my belief that no one can be a better judge of the practice of medicine than the man who practices it—the medical doctor! Let us not forget that the lay public holds the medical profession responsible for looking after the public's medical interests."—*AMA Secretary's Letter.*

* * *

The Michigan Medical Assistants Association held a meeting during the Annual session of the Michigan State Medical Society in Detroit, and had 372 members in attendance. Congratulations!

* * *

"Blue Cross" Plan Is Denied Subrogation. Analogies between insurance policies and "Blue Cross" hospital service plans fail to convince the Michigan Supreme Court that the equitable remedy of subrogation, available to insurance companies, should be extended to organizations furnishing hospital service. *The court*

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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

decides that a subscriber injured through a third party's negligence and affecting a lump sum settlement with that party does not have to reimburse a "Blue Cross" organization for the hospital care which it had furnished, even though the settlement made allowances for hospitalization. (Michigan Hospital Service v. Sharpe, 4/5/54).

Although the case is one of first impression in Michigan, the court finds ample authority for its decision in numerous state court cases holding that the right of subrogation never follows a primary liability. In the instant case, the court concludes that the hospital service organization had a primary obligation to provide service under the "Blue Cross" contract which contained no subrogation clause or pertinent exceptions from coverage.

Judge Reid, who dissents, is convinced that the settlement agreement, made without the acquiescence of the "Blue Cross" organization, is "a species of fraud" requiring the subscriber to reimburse the organization to the extent of the payments received by him for hospitalization.—*Law Week's Review.*

* * *

While the practicality of Blue Cross and Blue Shield needs public telling, it needs no further proving. The record of service speaks for itself. Last year, the 84 Blue Cross Plans and the 71 Blue Shield Plans provided over 925 million dollars in benefits. And all this was handled locally on each plan's level.

* * *

Earl I. Carr, M.D., Lansing, was elected to the board of trustees of the U. S. section of the International College of Surgeons meeting in Chicago last week. Dr. Carr, a regent for the Michigan region for the past eight years, also was co-sponsor with Professor Raymond Dorjet of Bordeaux, France, of the honorary fellowship presented by the college to Professor Pierre Donzelot, president of the University of Nancy and Saarbruch. Congratulations, Doctor Carr, on this well-deserved honor.

* * *

During the current fiscal year the total grants under the new Rehabilitation act have been $25,500,000. Of this amount the federal government is offering Michigan $1,047,155, to be matched from the state by $511,018. The United States pays 75 per cent of costs for extending and improving rehabilitation work, and two-thirds of the cost of special projects.

* * *

A financial report as of July 31, 1954, shows that Michigan Medical Service has provided $129,916,696.07 of services to its subscribers in addition to $8,270,226.45 for care of Veterans in their home towns, a grand total of $138,186,922.52. The last fiscal year saw the expenditure of $25,960,180.82. All this from our home-made health service plan!

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(Continued on Page 1282)

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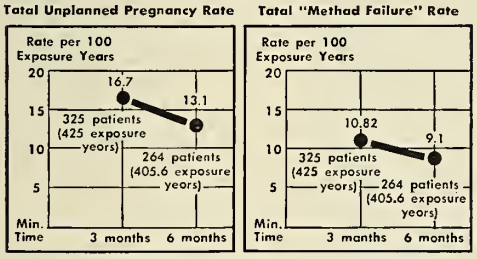
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PSYCHOLOGIC MOTIVATION AND CONCEPTION CONTROL

Psychologic motivation, defined as "... the sincere, urgent, uncomplicated desire to remain nonpregnant..." is an increasingly recognized factor in the success or failure of contraceptive measures.[1]

One of the factors influencing motivation, namely, parity, was appraised by Guttmacher[1] and associates in a three-year study of the jelly-alone [RAMSES® VAGINAL JELLY] method for contraception. A carefully selected group of 325 postpartum clinic patients used RAMSES VAGINAL JELLY for periods representing a total of 425 patient years of exposure. The technic showed marked effectiveness but was especially successful "among patients of lower parity."

Although the method was highly dependable, some unplanned pregnancies did occur. The pregnancies were divided into "patient failures" and "method failures." Patients readily admitting omission or irregular use of the jelly were classified in the first group, while those claiming regular and faithful use of the jelly were grouped in the latter category.



Comparison of conception control with RAMSES VAGINAL JELLY in patients using the method for 3-36 months and 6-36 months.[1]

During 425 patient years of exposure in 325 women using the jelly, the total unplanned pregnancy rate was only 16.7 per 100 patient years of exposure. When the "method failure" for the entire group is calculated, the unplanned pregnancy rate drops to 10.82 per 100 patient years of exposure. When only those patients who used the jelly-alone technic for six months and longer are considered (the usual length of time accepted for valid comparisons) the pregnancy rate is decreased markedly. This indicates that familiarity with and reliance on the method are probably also important. In 264 such patients, during 405.6 patient years of exposure, the total unplanned pregnancy rate was only 13.1 per 100 years of exposure, and the method failure rate dropped to 9.1 per 100 years of exposure.

Fitting the method to the patient

It has been demonstrated that motivation, parity, and patient-intelligence play important roles in the selection and the successful use of a conception control method and, therefore, that the final decision regarding the selection of method must be left to the physician who is fully cognizant of all these points.

When in the judgment of the physician, parity, anatomic factors, or motivation indicates the use of the diaphragm-and-jelly method of contraception, the RAMSES® TUK-A-WAY® Kit is recommended. The RAMSES® diaphragm is flexible and cushioned — provides an optimum barrier and utmost comfort. In combination with RAMSES jelly it offers an unsurpassed contraceptive technic. Both products are **accepted by the appropriate Councils** of the American Medical Association.

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1. Finkelstein, R.; Guttmacher, A., and Goldberg, R.: Am. J. Obst. & Gynec. 63:664, Mar., 1952.

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(Continued from Page 1280)

$2,000,000 for surveys. This is to be used for diagnostic treatment centers, and an equal amount for chronic disease facilities—$154,000 each in Michigan. The amounts for rehabilitation facilities and nursing homes amounts to $107,000 each.

* * *

President Walter Martin, M.D., of the AMA in a speech at the second World Congress on Cardiology in Washington said: "Here there are no political frontiers, no barriers of race or creed and no fear of each other's motives. We as physicians are united in a common desire to solve the riddle of man's enemy, disease."

* * *

"Watchdog" Guards Hospital Patients. A half-million-dollar "watchdog" stands guard over every person who has an operation in any one of 3,000 hospitals—and it doesn't cost the patient a penny.

The watchdog includes hundreds of persons—total strangers to the patient—who know more about the operation than he does, according to an article by Robert R. Goldenstein in the (September) *Today's Health* magazine, published by the American Medical Association.

They know every detail of the operation and the people who perform it, and can give a step-by-step accounting to representatives of five of "the most powerful medical organizations in the world," the article said. For the patient, this means that "every effort is being made to assure him of the best possible medical care."

This "round-the-clock" watcher of hospital patients is the little-publicized Joint Commission on Accreditation of Hospitals. It is backed by the AMA, the American Hospital Association, the American College of Surgeons, the American College of Physicians, and the Canadian Medical Association. They spend nearly half a million dollars a year keeping U.S. and Canadian hospitals operating at top efficiency. Dr. Kenneth Babcock, formerly director of Grace Hospital and president of Michigan Hospital Service, is a member of this commission.

Field representatives tour the country making routine inspections of the more than 3,000 hospitals on the commission's approved list, and of many others seeking its approval. Among the patient safeguards to be found in approved hospitals are fireproofing, adequate room for each patient and isolation space for contagious disease patients, proper diagnostic and treatment facilities under competent medical supervision, and emergency lighting in case of power failure and sterile conditions in operating rooms.

The approved hospital keeps records of anesthetic or drugs given, and any specimen taken from the body during operation is examined and recorded. Approval also depends on constant checks and periodic reviews by the hospital staffs of what is done in their institutions. Rates

(Continued on Page 1284)

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:A057 PROGESTERONE 25 MG., 10 CC VIAL
:A006 SODIUM ASCORBATE 100 MG., 2 CC AMPUL
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(Continued from Page 1282)

of mortality, unimproved cases, and Caesarean births must be low.

Irregularities of any of these standards might mean loss of approval. Hardly any hospital can meet all the requirements; a score of 75 is needed for full approval, which this year was given to 3,418 of the 7,500 hospitals in the U.S. and Canada. Some other hospitals may meet the standards but have not yet sought commission approval under its voluntary plan of accreditation.

The commission hopes that ultimately every hospital in the two countries will be brought under the program. Its goal is for a standardized program of high quality for all hospitals. Dr. Gunnar Gundersen, La Crosse, Wisconsin, first chairman of the commission, said recently the program represents "the best thinking and best inspiration" of the five great co-operating groups, and "if our duties are discharged well, the benefits to mankind through our profession, through our hospitals and for our civilization are unreckonable."

* * *

More Interns, Residents Now In Training. There are now 75 per cent more physicians in full-time graduate training in U.S. hospitals than there were 10 years ago. On the first of this year there were about 26,000 interns and residents training in hospital staff positions, compared to about 15,000 in 1945, according to the 28th annual report of the Council on Medical Education and Hospitals of the American Medical Association. The report appeared in the current (Sept. 25) *Journal of the American Medical Association.*

During the same period the number of openings for full-time graduate work doubled. On January 1, 1954, there were 34,172 openings compared to 16,095 in 1945. As of September 1, a total of 33,985 positions were open for the 1954-55 year, including 22,763 residencies and fellowships, and 11,222 internships. Residency openings decreased from 23,630 last year and internships increased from 11,006.

In 1945 applicants filled about 15,000, or more than 90 per cent, of the openings. In 1952-53 they filled about 74 per cent, or 26,894 of the positions. The council said this indicated a fundamental problem—the opportunities for intern and resident service had been increasing more rapidly than the number of available applicants. However, the percentage of filled positions increased to about 79 for the 1953-54 year.

The council helps provide better medical care by approving for training programs only hospitals meeting satisfactory basic educational and clinical standards. As of January 1, there were 1,347 approved hospitals offering such training. Hospitals offering internship programs increased only 7 per cent in 10 years, while the number of available positions rose 26 per cent. The council said the number of positions offered varies from year to year depending on the demand for staff members by approved hospitals. It said this suggests that careful self-appraisal by hospitals of their individual needs could re-

(Continued on Page 1286)

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Personal communication (Apr. 12, 1950)

1951 Of 119 patients treated with Azulfidine prior to 1944, 90 patients (75%) were symptom-free or considerably improved when re-examined in 1949.

Svartz, N.: Acta. Med. Scandinav. 141:172, 1951.

1952 In a series of 52 patients with chronic ulcerative colitis 30, or 58%, showed significant improvement after treatment with Azulfidine.

Morrison, L. M.: Gastroenterology 21:133, 1952.

1953 *Morrison says:* "Azopyrine [Azulfidine] . . . has been effective in controlling the disease in approximately two-thirds of patients who had previously failed to respond to standard colitis therapy currently in use."

Morrison, L. M.: Rev. Gastroenterology 20:744 (Oct.) 1953.

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(Continued from Page 1284)

sult in "a sharp decline if not in the elimination of" the present excess of positions available. This appraisal should be from the standpoint "not alone of services required but of their potential for providing a worth-while educational experience for these graduates."

About 90 per cent of the interns entered rotating programs designed to lay a foundation for general practice residencies or further specialty training. The trend toward higher pay for interns seemed to be slowing, the council said. Last year 44 per cent of the hospitals paid more than $150 a month; this year 30 per cent paid that. However, hospitals paying more than $200 had a lower occupancy rate for their positions than the lower-salary hospitals, indicating that the salary level "is not a decisive factor in attracting an intern staff."

* * *

The American Society of Physical Medicine and Rehabilitation. Dr. Harold Dinken, professor and head of the Department of Physical Medicine and Rehabilitation of the University of Colorado Medical School, Denver, Colorado, was elected president of the American Society of Physical Medicine and Rehabilitation at its annual meeting, Hotel Statler, Washington, D. C., Tuesday, September 7, 1954.

The American Society of Physical Medicine and Rehabilitation is composed of physicians specializing in the diagnosis and treatment of physical disabilities. Dr. Ben L. Boynton, Department of Physical Medicine, Northwestern University Medical School, Chicago, is president-elect of the Society for the coming year.

Dr. Murray B. Ferderber, assistant professor of Medicine, University of Pittsburgh School of Medicine, was elected vice president and Dr. Max K. Newman, director, Physical Medicine and Rehabilitation, Detroit Memorial and Sinai Hospitals, Detroit, was re-elected secretary-treasurer.

Drs. Donald L. Rose, Kansas City, Kansas, and Louis B. Newman, Chicago, were elected to serve on the Board of Governors.

* * *

The Indiana State Medical Association announces a post-AMA convention tour following the November 29-December 2 Miami Clinical session. The $399.00 tour will cover Puerto Rico, via Jamaica, Haiti, and the Dominican Republic, including hotels, tours, and meals (except in Puerto Rico). For detailed information and itinerary write J. A. Waggener, Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis 4, Indiana.

* * *

The Michigan Health Council recently aided the following doctors of medicine to locate in Michigan: William L. Martin, M.D., in Romeo; James E. Walters, M.D., in Big Rapids; Gerald J. Aben, M.D., in Wayne; Alden F. Wiley, M.D., in Kalkaska; and William T. Edmunds, M.D., in Ypsilanti. For information on the M.D. Placement Bureau, write Michigan Health Council, 706 N. Washington Avenue, Lansing.

(Continued on Page 1288)



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(Continued from Page 1286)



Don E. Johnson of Flint, a member of the Board of Trustees of the American Cancer Society, the Michigan Cancer Co-ordinating committee, and for years an active stimulus in cancer control work in Genesee County and througout this state, was honored by members of the Genesee County Medical Society and officers of the Michigan State Medical Society at a testimonial banquet held at the Sheraton-Cadillac Hotel, Detroit, September 28, 1954. A scroll of appreciation was presented to Mr. Johnson as well as an embossed copy of a resolution, eulogizing Mr. Johnson's cancer control activities, adopted by the MSMS House of Delegates on September 27.

Present at the Johnson testimonial dinner were: MSMS President L. W. Hull, M.D., Detroit; MSMS Speaker J. E. Livesay, M.D., Flint; MSMS Councilor H. H. Hiscock, M.D., Flint; and Delegates C. L. Weston, M.D., Owosso, R. J. Winfield, M.D., Marlette, Leon M. Bogart, M.D., Robert Bradley, M.D., Frank D. Johnson, M.D., C. W. Colwell, M.D., MSMS Alternate Delegate John E. Wentworth, M.D., F. A. Barbour, M.D., S. T. Flynn, M.D., and F. W. Baske, M.D., all of Flint.

The September, 1954, issue of the Connecticut State Medical Journal carries a two-column editorial concerning the dedication of the Beaumont Memorial. The article is very detailed and very complimentary to the medical profession in Michigan.

* * *

Louis W. Lewis, M.D., assistant professor of anesthesiology, University of Michigan Hospital and Medical School, Ann Arbor, spoke at the Twenty-ninth Congress of Anesthetists, annual meeting of the Members of the International Anesthesia Research Society at Los Angeles, California, October 11-14, 1954. The title of his paper was "Evaluation of Sympathetic Activity Following Chemical or Surgical Sympathectomy."

* * *

The International Academy of Proctology will hold its annual convention at the Plaza Hotel, New York City, March 23-26, 1955. For program write the Academy at 147-41 Sanford Avenue, Flushing, New York.

* * *

The American College of Surgeons announces a sectional meeting in Cleveland, Ohio, February 22-24, 1955, at Hotels Cleveland and Holland. Clinics will be held at St. Luke's Hospital, University Hospitals, Mt. Sinai Hospital, Cleveland Clinic, Lakeside Hospital, and City Hospital. Surgeons, anesthesiologists, and nurses will participate in this program and are cordially invited to obtain complete information by writing Associate Director, 40 E. Erie Street, Chicago 11, Illinois.

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The Michigan Chapter of the Arthritis and Rheumatism Foundation has approved grants-in-aid for research and for the home care of in-bound arthritics in Detroit and 10 other principal cities in Michigan amounting to $121,880. These grants-in-aid were recommended by the Medical Advisory Committee headed by James J. Lightbody, M.D., Detroit, Medical Director of the Michigan Chapter.

* * *

"It is not how old you are, but how young you feel, that counts as much in the operating room as it does on the golf course," according to Frederick A. Coller, M.D., Ann Arbor, in an address before St. Johns Hospital, Santa Monica, California, in September. This statement was in Dr. Coller's lecture—one of three— on "Surgery in the Aged."

* * *

A nationwide "Operation Health Career Horizons" was announced by A. W. Dent, President of the National Health Council, at a recent meeting in New York City. The project is sponsored by the Council with support from the Equitable Life Assurance Society of the United States. The need for broad national action to close the gap between what the health professions know and what they are staffed to do to save lives and make them more worth living, was stressed at this New York meeting by Ray D. Murphy, president of the Equitable Society.

Fringe benefits equal $720 per employe, according to the final results of the Chamber of Commerce survey. In 1953, employers paid $720 per employe for such benefits as Social Security, pensions, vacations and insurance.

* * *

Kenneth B. Babcock, M.D., Chicago, Director of the Joint Commission on Accreditation of Hospitals, was guest speaker at a general session at the recent American Hospital Association convention in Chicago. Dr. Babcock discussed hospital accreditation as a public service and presented a survey of its future and underlying philosophies.

* * *

A. D. Ruedemann, M.D., Detroit, has been chosen President of the American Society of Ophthalmologic and Otolaryngologic Allergy. Congratulations, Dr. Ruedemann!

* * *

The Middle Section of the American Laryngological, Rhinological, and Otological Society will meet in Detroit, Sheraton-Cadillac Hotel, January 24, 1955. For information and program write French K. Hansel, M.D., 634 N. Grand Blvd., St. Louis, Missouri.

* * *

Arthur G. Baker, M.D., for many years associated with the Michigan Department of Health as chief of the Section on Local Health Services, became deputy commissioner of the Department of Public Health at

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Pittsburgh, Pennsylvania, September 15. Congratulations, Dr. Baker, and best wishes for all success!

* * *

C. C. Sturgis, M.D., Ann Arbor, president of the American College of Physicians, was a member of a panel participating in a nationwide closed circuit television symposium on "The Management of Hypertension" held in twenty-three cities, September 23. The symposium was sponsored by the American College of Surgeons and Wyeth Laboratories, Philadelphia, Pennsylvania.

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Robert J. Priest, M.D.....*Secretary*

Program For 1954-1955

October 12, 1954—Tuesday, 8:15 p.m.—"The Low Salt or High Water Syndrome," by Elliot V. Newman, M.D., *Professor of Experimental Medicine, Vanderbilt University School of Medicine,* Nashville, Tennessee.

November 9, 1954—Tuesday, 8:15 p.m.—The Edsel B. Ford Lecture, "The Hormones of the Posterior Pituitary," by Vincent du Vigneaud, Ph.D., *Professor of Biochemistry, Cornell University Medical College,* New York, N. Y.

December 14, 1954—Tuesday, 8:15 p.m.—"Primary Tumors of the Hand," by Robert H. Clifford, M.D., *Surgeon in Charge, Division of Plastic Surgery,* Henry Ford Hospital, and "Gynecomastia," by Richmond W. Smith, M.D., *Physician in Charge, Division of Endocrinology,* Henry Ford Hospital and Alexander P. Kelly, Jr., M.D., *Associate Surgeon, Division of Plastic Surgery,* Henry Ford Hospital.

January 11, 1955—Tuesday, 8:15 p.m.—"The Differential Diagnosis and Management of the Lymphomata," by Charles A. Doan, M.D., *Dean and Director of Medical Research, Ohio State University,* Columbus, Ohio.

February 8, 1955—Tuesday, 8:15 p.m.—"Physiological and Clinical Aspects of Hyperthermia," by Robert D. Dripps, M.D., *Professor of Anesthesiology, University of Pennsylvania,* Philadelphia, Pennsylvania.

March 8, 1955—Tuesday, 8:15 p.m.—"Psychotherapy," by Clarence B. Farrar, M.D., *Emeritus Professor of Psychiatry, University of Toronto,* Canada.

April 12, 1955—Tuesday, 8:15 p.m.—"Surgical Management of Hypertension," by Edgar A. Kahn, M.D., *Professor of Surgery, University of Michigan,* Ann Arbor, Michigan.

May 10, 1955—Tuesday, 8:15 p.m.—The Roy D. McClure Memorial Lecture, "The History of the Care and Repair of Wounds," by Allen O. Whipple, M.D., *Emeritus Professor of Surgery, College of Physicians and Surgeons,* New York, N. Y.

All meetings will be held in the Henry Ford Hospital Auditorium.

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DATE	*SUBJECT*	*GUESTS*
Sept. 5	Report On the Living	A Film
Sept. 12	The Challenges of Communicable Diseases	William R. Stinger, M.D., Detroit John A. Cowan, M.D., Lansing
Sept. 19	Mechanical Heart	A Film
Sept. 28	89th Annual Sessions Michigan State Medical Society	L. W. Hull, M.D., Detroit J. E. Livesay, M.D., Flint W. S. Reveno, M.D., Detroit

Louis J. Hirschman, M.D., Traverse City, was guest speaker over Station WWTV, Cadillac, Michigan, on August 31 when he was interviewed on "Medical Progress in the Last 75 Years." Dr. Hirschman was the Governor's selection to represent Michigan at the World Medical Association—A. H. Robins Co. meeting held in Richmond, Virginia, last autumn, which featured a seventy-five-year-old practitioner from every state in the union.

* * *

Wayne University's new $450,000 medical library advanced a step nearer fruition in September with the appointment by the Detroit Board of Education of a firm of architects and engineers to begin the project. Funds for the building were assured with the recent announcement of a $175,000 grant from the Helen L. DeRoy Foundation. The new structure will be built at the north end of Wayne's medical campus in downtown Detroit.

* * *

The Wayne University College of Medicine Alumni Association held its regular banquet in conjunction with the Michigan State Medical Society Session Thursday, September 30, 1954, in the English Room of the Sheraton-Cadillac Hotel.

Alumni, their wives and guests attended a reception immediately prior to the banquet, with the A. J. Meyer Pharmacy as their host.

Bob Hall, radio and television star, entertained with some of his "believe it or not" extemporaneous rhyming as he spoke. Donald S. Leonard, LL.D., a long-time friend of Wayne Medical Alumni, spoke on "A Citizen's Responsibility".

Robert I. McClaughry, M.D., assistant dean, College of Medicine, brought greetings from Dean Gordon H. Scott who could not be present. John E. Webster, M.D., president of the Medical Alumni Association, presented a report of activities and announced the status of the Medical Library. Robert H. Baker, M.D., MSMS President, gave the official welcome on behalf of the State Society.

Among those present were Dr. and Mrs. David H. Burley, Class of '93, the oldest alumnus present, and Leonard Proctor, John Jacoby, and others of the Class of '55 were the youngest present.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, March 7, 1955
Surgical Anatomy and Clinical Surgery, two weeks, March 21, 1955
Surgery of Colon and Rectum, one week, November 29
General Surgery, two weeks, December 6
Clinical Fractures, two weeks, by appointment

GYNECOLOGY—Vaginal Approach to Pelvic Surgery, one week, November 1
Office and Operative Gynecology, two weeks, February 14, 1955

OBSTETRICS—General and Surgical Obstetrics, two two weeks, November 1

MEDICINE—Gastroscopy and Gastroenterology, two weeks, November 1

RADIOLOGY—Clinical Diagnostic Course, two weeks, by appointment

PEDIATRICS—Clinical Course, two weeks, by appointment

DERMATOLOGY—Clinical Course, two weeks, by appointment

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Others present included E. C. Swanson, M.D., J. Earl McIntyre, M.D., Lansing, members of the State Board of Medical Registration, and Alexander Blaine, M.D., Osborne A. Brines, M.D., Harry L. Clark, M.D., M. Raymond Collings, M.D., Arthur E. Hammond, M.D.,, Wilfrid Haughey, M.D., Claude R. Keyport, M.D., Russell G. Lightbody, M.D., James E. Lofstrom, M.D., Perry C. Martneau, M.D., Thomas H. Miller, M.D., Robert C. Mochlig, M.D., Carlin P. Mott, M.D., Grover C. Penberthy, M.D., George Sewell, M.D., Arthur H. Smith, M.D., and Roger V. Walker, M.D.

* * *

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1955

Anatomy *(Thursdays)* .....February 10-May 26
Gerontology: Medicine's Responsibility for Older People .....January 13-15
Internal Medicine
Clinical Internal Medicine *(Thursdays)* .....January 6 - April 14
Disease of the Heart.....March 14 - 18
Electrocardiographic Diagnosis .....March 21-26
Metabolism and Endocrinology.....March 28 - April 1
Diseases of Blood and Blood-Forming Organs..April 4-8
Recent Advances in Therapeutics.....April 11-15
Diseases of Gastrointestinal Tract.....April 18-22
Obstetrics .....January 24-26
Pediatrics .....January 26-28
(Program combined January 26)
Gynecology .....February 23-26
Ophthalmology .....April 18-20
Otolaryngology .....April 14-16
Radiology, Diagnostic .....April 4-8
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* * *

AMERICAN CONGRESS OF PHYSICAL MEDICINE AND REHABILITATION

At the thirty-second annual scientific and clinical session of the American Congress of Physical Medicine and Rehabilitation held at the Hotel Statler, Washington, D. C., September 6-11, 1954, the following officers were elected: William D. Paul, M.D., Iowa City, president; Howard A. Rusk, M.D., New York, president-elect; Gordon M. Martin, M.D., Rochester, Minnesota, first vice president; A. B. C. Knudson, M.D., Washington, D. C., second vice president; Donald L. Rose, M.D., Kansas City, Kansas, third vice president; Arthur C. Jones, M.D., Portland, Oregon, fourth vice president; Frederic J. Kottke, M.D., Minneapolis, fifth vice president; Frances Baker, M.D., San Mateo, California, secretary; Frank H. Krusen, M.D., Rochester, Minnesota,

Say you saw it in the Journal of the Michigan State Medical Society



treasurer; Walter J. Zeiter, M.D., Cleveland, executive director; and, Dorothea C. Augustin, Chicago, executive secretary.

To serve on the Editorial board of *Archives of Physical Medicine and Rehabilitation*, the official journal of the Congress and Society, Dr. Earl C. Elkins of Rochester, Minnesota, was re-elected to succeed himself. Dr. William Bierman of New York City was elected to serve for a period of seven years.

The highest honor the American Congress of Physical Medicine and Rehabilitation can bestow upon an individual whose accomplishments in the field of physical medicine and rehabilitation have been outstanding in nature and have resulted in raising the diseipline of the specialty to a higher standard is the Gold Key. This award was given to Dr. George Morris Piersol, Dean of the Graduate School of Medicine at the University of Pennsylvania.

In the scientific exhibit, the Gold Medal was awarded to Doctor Odon von Werssowetz, Gonzales, Texas, and associates for the exhibit on "Assistive Supports in Rehabilitation of Paralytic Hand"; the Silver Medal was awarded to Dr. Louis N. Rudin and Daniel J. Cronin, Fort Howard, Maryland, for the exhibit on "Mechanical Substitutes for Paralyzed Muscles"; and the Bronze Medal was awarded to Dr. Delilah Riemer, Bedford, Mass. and associates for the exhibit on "The Rehabilitation of the Psychiatric Patient."

Old diathermy machines endanger air navigation. The *Michigan Air News* of September features a story on *illegal* diathermy machines allegedly used in hospitals, doctors offices and homes—devices first developed before 1947 which now are hazards to air navigation.

Despite the threat of severe civil penalties (such as $10,000 fine and up to two years of imprisonment) the *Air News* story estimated that at least 35 per cent of all diathermy machines now in operation are *illegal!* The result is that, due to spurious signals emanating from these pseudo "radio" transmitters, airborne reception signals can be seriously affected; another adverse effect of these devices is on radar screens, increasingly relied upon today for faster and more efficient air traffic control in high-density areas.

The *Air News* lists a tragic possibility resulting from the use of these *illegal* transmitting machines; they are capable of "capturing" the undivided attention of radio-controlled homing guided missiles, should one be launched for training purposes from the many bases being set up around our domestic approaches.

* * *

A Bureau of Labor survey shows that of 13,200,000 persons over sixty-five only 4,000,000 work or are the wives of workers.

Say you saw it in the Journal of the Michigan State Medical Society

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

ANNUAL REPORT for the Fiscal Year, September 1, 1952—August 31, 1953. W. K. Kellogg Foundation, Battle Creek, Michigan.

THE EPIDEMIOLOGY OF HEALTH, a New York Academy of Medicine Book, Iago Galdston, M.D., Editor. Minneapolis: Health Education Council, New York, 1953.

LIVING WITH A DISABILITY. New York: The Blakiston Company, Inc. Price $3.50.

THE PERMANENT REVOLUTION IN SCIENCE. By Richard L. Schanck, chairman, Department of Sociology, Bethany College Lecturer, Carnegie Institute of Technology. New York: Philosophical Library. Price $3.00.

This is a purely philosophical book attempting to outline the changes which are developing in scientific investigation, and the adoption of the theory of Methodology. The book is small, only 112 pages, and can best be indicated by quoting the titles of some of the chapters. One with a philosophical vent should be interested in the reading. Chapters are "From Speculation to Experiment"; "Mechanics and the Individual; the Emergence of Physics"; "The Notions of Systems: The Emergence of Chemistry"; "The System and its Field: The Emergence of Biology"; "Freud's Psycho-analytical Approach to Personality"; "The Telic Sociologists; Continuous Progress;" "The Permanent Revolution and the Problem of Ethics;" and, "The Institute of Experimental Method."

BEYOND THE GERM THEORY, The Roles of Deprivation and Stress in Health and Disease. By Iago Galdston, M.D., Editor. A New York Academy of Medicine Book. Minneapolis: Health Education Council, New York, 1954. Price $4.00.

Though this book is a volume of only 180 pages, it presents a series of significant contributions to the philosophy of health and disease. These contributions stem from the 12th Annual Eastern States Health Conference, and, in particular, deal with the disease-producing effects of stress and deprivation. Utilizing the concepts of Claude Bernard, Walter Cannon and Hans Selye, the book presents sections on the "Dynamics of Deprivation and Stress", "Nutritional Deprivation and Stress", "Psychological Deprivation and Stress", "Social Stress and Deprivation".

The material upon which most of these papers is based has a direct clinical application and will be familiar to the practising physician. Though this in general is also true of the sections on psychological and sodial stress the experimental and clinical factors are not so well known or so generally applied to clinical practice. These sections are particularly interesting and important in the study and treatment of the social and psychological illnesses seen by so many practitioners.

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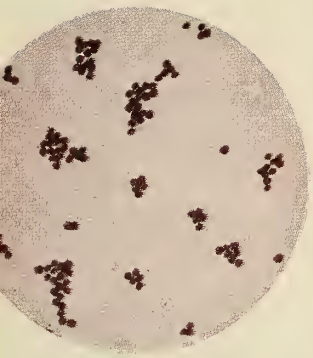
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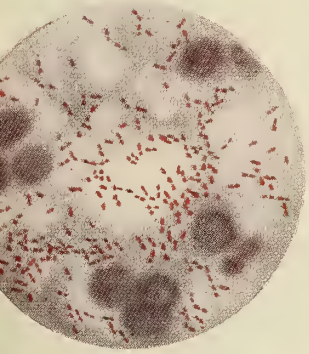
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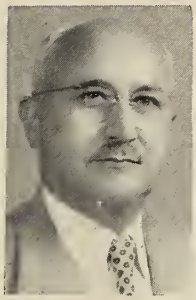
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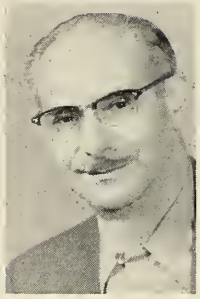
THE JOURNAL
of the Michigan State Medical Society

VOLUME 53 DECEMBER, 1954 NUMBER 12

Contributors to This Issue



EARL A. PETERMAN, M.D.



M. B. SOFEN, M.D.

Plan to Attend
the
MICHIGAN CLINICAL
INSTITUTE
March 9-11, 1955
(Program—Pages 1361-1371)

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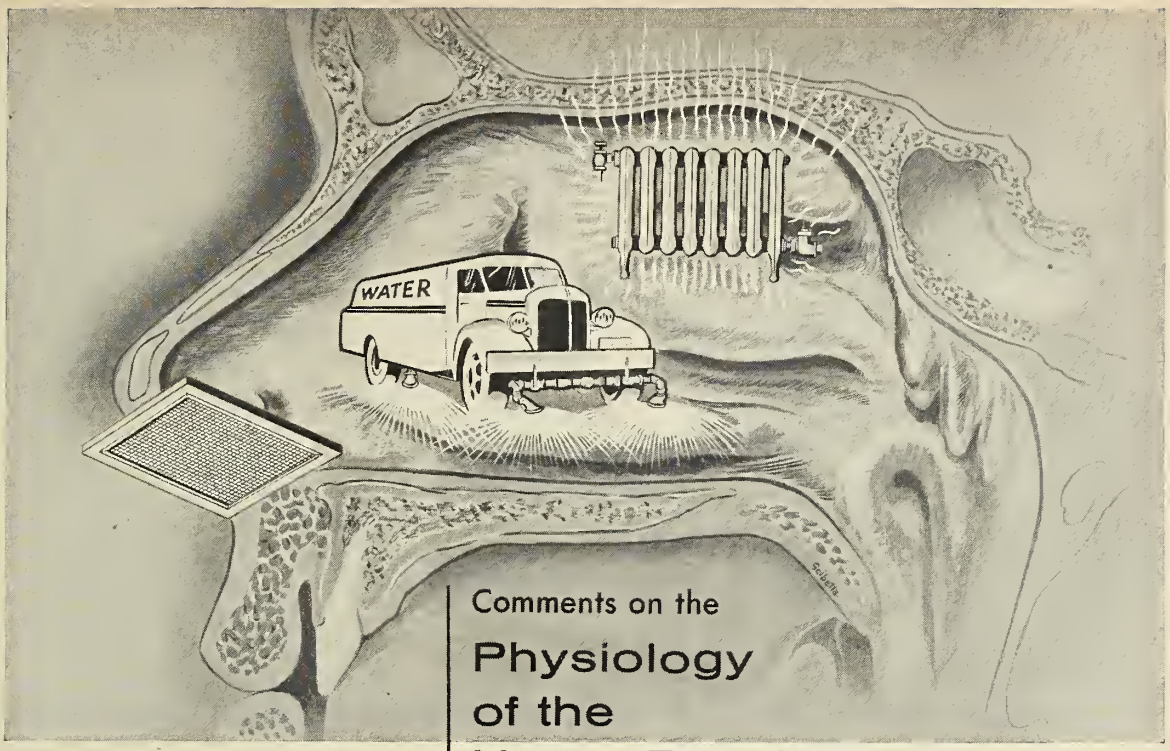
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HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of October 20, 1953

Sixty-four items were presented to the Executive Committee of The Council on October 20. Chief in importance were:

- The Committee on Arrangements for the March, 1955, Testimonial Dinner, honoring Michigan M.D.'s who are national medical association presidents, was selected. Committee members will be: Howard Benjamin, M.D., Grand Rapids; R. C. Buerki, M.D., Detroit; L. C. Carter, M.D., Detroit; Douglas Donald, M.D., Detroit; A. C. Furstenberg, M.D., Ann Arbor; Bruce Lockwood, M.D., Detroit; C. I. Owen, M.D., Detroit, J. M. Sheldon, M.D., Ann Arbor, and H. A. Towsley, M.D., Ann Arbor.
- Report was presented on the Michigan Department of Health's Multiphasic Screening Tests and a letter to all Michigan county medical society presidents and secretaries and an editorial to be published in The Journal of the Michigan State Medical Society, were authorized.
- Committee Reports: The following reports were given consideration: (a) Ethics Committee, meeting of October 1, 1954; (b) Permanent Conference Committee, meeting of October 13, 1954; and (c) Committee Organization, meeting of October 15, 1954.
- President R. H. Baker, M.D., appointed the following to MSMS Committees: H. A. Towsley, M.D., Ann Arbor, Postgraduate Medical Education Committee; Joseph A. Johnston, M.D., Detroit, Rheumatic Fever Control Committee; Charles M. Bell, M.D., Grand Rapids, Maternal Health Committee; J. L. Leach, M.D., Flint, Public Relations Committee; and J. E. Webber, M.D., Grand Rapids, Advisory Committee to the Michigan State Medical Assistants Society.
- President R. H. Baker, M.D., presented tape recordings he made for use of the Michigan Tuberculosis Association in connection with its 1954 Christmas Seal Sale.
- The matter of obtaining reports from University Hospital re patients referred to them was sent to the Committee to meet with University Hospital.
- The policy of the Michigan State Medical Society in regard to military deferment was reaffirmed.
- The proposed program for the 1955 County Secretaries-Public Relations Conference was presented and approved.
- MSMS membership for interns and residents was discussed and letter to county medical society officers was authorized.
- The Chairman of the Industrial Health Committee, O. J. Johnson, M.D., Bay City, was authorized to attend the 1955 Industrial Health Conference in Washington, D. C.
- The matter of inviting the Congress on Industrial Health to hold its 1956 Congress in Detroit was referred to the AMA Delegates.
- President-Elect W. S. Jones, M.D., Menominee; Secretary L. Fernald Foster, M.D., Bay City; Councilor Ralph W. Shook, M.D., Kalamazoo; Speaker J. E. Livesay, M.D., Flint; Legal Counsel J. Joseph Herbert and Public Relations Counsel H. W. Brenneman were authorized to attend the 1955 Michigan Congressional Dinner.
- An operating room nurses conference, coincident with the 1955 Michigan Clinical Institute, was authorized if approved by the nursing associations.
- C. Allen Payne, M.D., Grand Rapids, was appointed General Chairman on Arrangements for the 1955 MSMS Annual Session in Grand Rapids.
- The decision was made that the Heart Bulletin (Published by the Michigan Department of Health at a cost of $1.56 per annual subscription) to be sent to only those MSMS members who have indicated a desire to receive same.
- J. W. Towey, M.D., will be the MSMS representative at the State Sanatarium Commission meeting on November 4.
- Report from G. B. Corneliuson, M.D., re Conference on Physicians and Schools, was read and received with thanks.
- Resolution re Blue Cross-Blue Shield submitted by E. F. Sladek, M.D., Traverse City, was presented and referred to the AMA Delegates.
- The Committee to Study Periodic Health Examinations in Hospitals (as authorized by the 1954 MSMS House of Delegates) was appointed by Council Chairman William Bromme, M.D., as follows: O. B. McGillicuddy, M.D., Lansing, Chairman; L. J. Bailey, M.D., Detroit; E. P. Vary, M.D., Flint; Vergil N. Slee, M.D., Hastings; and Harry Weitz, M.D., Traverse City.
- The Committee to Study Closed Panel Practice (as authorized by The Council, September 26, 1954) was appointed by Council Chairman William Bromme, M.D., as follows: L. W. Hull, M.D., Detroit, Chairman; E. H. Fenton, M.D., Detroit; Fred E. Ludwig, M.D., Port Huron; O. J. Johnson, M.D., Bay City; M. S. Chambers,

(Continued on Page 1304)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1302)

M.D., Flint; and G. Thomas Aitken, M.D., Grand Rapids.

- Council Chairman William Bromme, M.D., appointed the following Standing Committees of The Council, MSMS: *Finance Committee:* Ralph W. Shook, M.D., Kalamazoo, Chairman; W. B. Harm, M.D., Detroit; B. M. Harris, M.D., Ypsilanti; H. H. Hiscock, M.D., Flint; W. S. Jones, M.D., Menominee; and G. W. Slagle, M.D., Battle Creek. *Publication Committee:* G. B. Saltonstall, M.D., Charlevoix, Chairman; W. D. Barrett, M.D., Detroit; R. S. Breakey, M.D. Lansing; L. C. Harvie, M.D., Saginaw; W. M. LeFevre, M.D., Muskegon; and T. P. Wickliffe, M.D., Calumet. *County Societies Committee:* D. B. Wiley, M.D., Utica, Chairman; F. H. Drummond, M.D., Kawkawlin; J. D. Miller, M.D., Grand Rapids; B. T. Montgomery, M.D., Sault Ste. Marie; Arch Walls, M.D., Detroit, and H. B. Zemmer, M.D., Lapeer.
- The Committees of The Council for the year 1954-55 were presented by Council Chairman William Bromme, M.D., and approved.
- Doctor Bromme presented the record attendance figures at the 1954 MSMS Annual Session, as follows:

M.D.'s	2,295
Guests	534
Exhibitors	532
Woman's Auxiliary Members	171
Medical Assistants	372
TOTAL	3,904

- The monthly progress report of the Legal Counsel included items re: (a) Au Gres, Michigan D.O. problem; and (b) Questions propounded by State Health Commissioner A. E. Heustis, M.D., re laboratory work for chiropodists; definition of a hospital; and, artificial insemination.
- The monthly reports of the Council Chairman, the President, the President-Elect, Secretary, Editor, Rheumatic Fever Control Co-ordinator, were presented and approved.
- The monthly progress report of the Public Relations Counsel included items re: (a) "Planning Your Career" Motion Picture; (b) AMA Legislative Conference; (c) Motion Picture on Periodic Health Appraisal for M.D.'s; and (d) Requests of Michigan Psychological Association.
- Matters of mutual interest were discussed with A. E. Heustis, M.D., Michigan's Commissioner of Health, including (a) poliomyelitis; (b) anhydrous ammonia; (c) tuberculosis; (d) hospital licensing; (e) synnematin; and (f) premarital law.
- Otto O. Beck, M.D., reported on recent developments in the furnishing of the Beaumont Memorial on Mackinac Island.
- H. Waldo Bird, M.D., and M. H. Marks, M.D., of Detroit, were present and reported on the practice of psychotherapy by lay persons.
- Councilor reports on the condition of the profession in their respective Districts were given.

COURSE IN GERONTOLOGY

The Michigan State Medical Society and University of Michigan announce a course for Doctors of Medicine in "Gerontology: Medicine's Responsibility to Older People" to be given at Ann Arbor, January 13, 14, 15, 1955.

Topics include: Medicine's Responsibility to Older People, What is Aging?, Clinical Problems Associated with Aging, Preventive Geriatrics, The Physician's Role in the Community.

Sponsors are Michigan State Medical Society and University of Michigan, Institute of Industrial Health, Medical School, Division of Gerontology, School of Public Health, and Postgraduate Medicine.

Conference management is under the direction of the Institute of Industrial Health and Postgraduate Medicine.

For program, address letter to the Secretary on Gerontology Course, 1610 University Hospital, Ann Arbor, Michigan.

BLUE SHIELD AND GOVERNMENT INSURANCE

"The American medical profession does not need federal subsidy such as compulsory health insurance or state socialized medicine for the expansion of prepaid care because the mechanism for broader distribution already exists," said L. Howard Schriver, M.D., President of the Blue Shield Commission, at a banquet enrolling the 30 millionth member of Blue Shield.

WORRY MAKES MANY ILL

Worry causes illness in the ratio of one to five among urban patients in Great Britain, the *London Daily Mail* reports. In rural areas, the ratio is one to ten.

Six doctors, quoted by the newspaper, said illnesses caused by worry presented to doctors problems as time and willingness to listen to such patients.

The physicians cite as typical of worry illness:

"The patient with the duodenal ulcer whose pain reappears after a quarrel with his wife; the child stricken by asthma the moment he goes back to school; the headache of frustration and the itching of impotent rage —all these are familiar problems for the physician."—*Philadelphia Medicine,* Sept. 24, 1954.

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When growth is most rapid, Karo helps to meet the accelerated nutritional demand. It offers in convenient, well tolerated form the carbohydrate additive which is usually prescribed, since milk alone provides just 28% of the optimum 60% carbohydrates. Karo Syrup is also readily available, inexpensive, a miscible liquid that is easy to use. Light and dark Karo are interchangeable in formulas—both yield 60 calories per tablespoon.

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Karo eases the transition from formula to whole milk, from liquid to solid foods. The familiar taste of Karo makes whole milk more readily accepted, and many solid foods will be easily introduced into the diet if flavored with a little Karo Syrup. Rapidly assimilable carbohydrate is needed for the rapid metabolism of the small child. Since Karo is low in osmotic pressure, it is non-irritating. It also precludes fermentation because no excess of hydrolized sugars is formed.



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Cancer Comment

Report on American Cancer Society Annual Meeting

Prepared by L. E. Holly, M.D., Muskegon, upon recommendation of the Michigan Cancer Co-ordinating Committee.

The regular annual meeting of the American Cancer Society, Incorporated, was held in New York City at the Hotel Roosevelt, October 17, 1954, through October 22. The scientific session was held at the Hotel Biltmore, Monday and Tuesday, October 18 and 19. In attendance were approximately 725 delegates, members, and guests.

The volunteers and lay delegates of the divisions and members of the New York Staff spent Monday and Tuesday in refresher courses held at the headquarters in the Hotel Roosevelt.

Group meetings were held with the members divided into five groups. Among the subjects discussed were new goals in public education, emphasis on the service program of the national organization as well as the professional aspects and the responsibilities of the professional group in the educational program.

Tuesday the divisional delegates, volunteer workers and staff met for panel discussions in the forenoon while in the afternoon Dr. Charles S. Cameron, medical and scientific director and vice president of the American Cancer Society, talked on "Research on the March" with particular reference to the new electronic cell counter. Dr. Cyrus Erickson of the University of Tennessee reviewed results of a citywide screening for cancer of the cervix using the cytological method.

The scientific program was attended by a large number of layman as well as physicians. The banquet hall of the Hotel Biltmore was filled for each of the scientific sessions. This year emphasis was placed on the subject of cancer of the uterus with a critical appraisal of the problem. In former years other specific types of cancer have been discussed.

As in the past, outstanding members of the medical profession in this country and abroad were the discussants at the scientific sessions. Among the professional men were Dr. F. Gagnon of Laval University, Quebec City, and Dr. John Higginson of the South Africa Institute for Medical Research. There appears to be very little difference in the incidence of cancer of the cervix among those who have had children and those who have not had children. There is more cancer among the married women than the non-married. Much emphasis in the discussion was placed upon the matter of penile hygiene, indicating that circumcision in early life not only helps to prevent cancer of the penis but also seems to play a part in the presence or absence of carcinoma of the cervix.

Discussion of laboratory procedures pointed out the fact that the Papanicolaou smear was accurate in ninety-four per cent of all cases of carcinoma of the cervix.

Of definite importance to the medical profession and an important aid in the rapid screening technique of uterine cancer or any other cancer by the cytological method is the development by the American Cancer Society and the Airborne Instruments Laboratory of Mineola, New York, of a cytological analyzer based on cell size and nuclear density. The first model was demonstrated and brought forth a great deal of interest on the part of the medical profession. Definitely more will be heard about this method of rapid smear examination. Use of this instrument will increase the productivity of present staffs by eliminating the obviously normal smears. Patients will be collecting their own specimens as they now are doing in several of the mass survey studies. This should go a long way toward the early detection of cancer of the female genital tract and through early detection comes a greater number of survivals.

A panel discussion of treatment of cancer of the uterus was conducted by Dr. Joseph V. Meigs of the Vincent Memorial Hospital in Boston, Dr. Isadore Lampe of the University of Michigan Medical School, Dr. Juan A. del Regato of the Penrose Cancer Hospital, Colorado Springs, Dr. Alexander Brunschwig of Memorial Hospital, New York City, Dr. Simeon Cantril of the Swedish Hospital, Seattle, Washington, and President-Elect Dr. Howard C. Taylor of Columbia-Presbyterian Medical Center. The consensus of opinion as of now is that slow and steady progress is being made in the salvage of the 20 per cent of stage I carcinoma who fail to respond to treatment. It is still the problem for the gynecologist, the radiobiologist, and the radiologist. High energy radiation seems to offer some slight increase in the salvage rate. The degree of lymph node invasion determines whether or not the case will be controlled. Infection plays a very important role and is a serious complication in all cases of carcinoma of the uterus.

It is of interest to the medical profession that these symposia on cancer conducted at the annual meeting of the American Cancer Society presents the overall picture of the particular cancer under discussion not only from the epidemiological aspects but also from the laboratory diagnosis, the prophylaxis, and early detection as well as definitive treatment. They have been most constructive with international authorities on the subject giving

(Continued on Page 1310)



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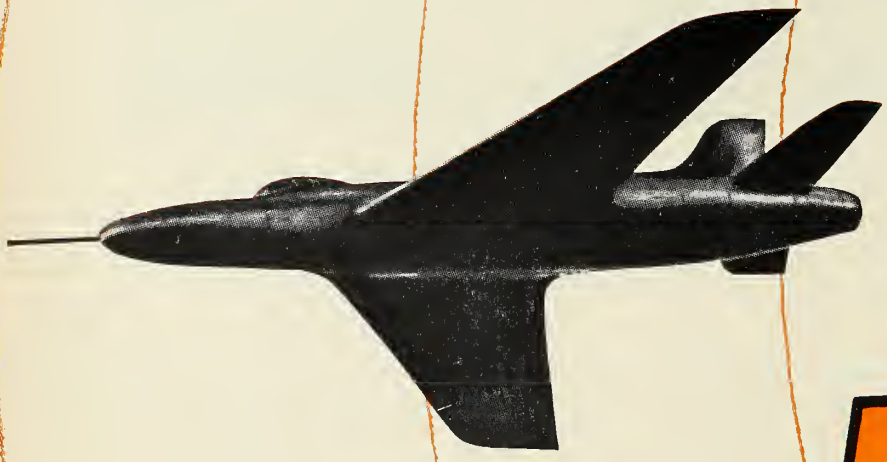
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REPORT OF AMERICAN CANCER SOCIETY ANNUAL MEETING

(Continued from Page 1306)

papers and entering into the many panel discussions. Question- and answer-periods were very worth while.

The annual meeting of the members of the corporation was held on Wednesday and Thursday. A detailed report of work of the organization was presented by the executive secretary, Mefford Runyon, and the report of Medical and Scientific Director Dr. Charles S. Cameron was received with much interest.

The President's address was given by Dr. Popma of Idaho. The president-elect, who took office at the annual meeting is Dr. Howard C. Taylor of Columbia-Presbyterian Medical Center, New York City.

The American Cancer Society gave its Annual Award to Dr. Ernest E. Lawrence, Director of the Radiation Laboratory at the University of California.

At the annual meeting Don Johnson of Flint, Michigan, an honorary member of the Michigan State Medical Society, was elected a lay director-at-large and a member of the executive committee. Dr. Harry S. Nelson of Detroit was elected as a professional director-at-large with membership in the executive committee. Dr. Leland E. Holly was elected a professional member of the board of directors from region IV, while Dean Neef of Wayne University was elected as a lay director member to the board. Region IV is comprised of the states of Minnesota, Iowa, Wisconsin, Illinois, Indiana, and Michigan. All directors were elected for a two-year period. This is the first year that the regions have been represented on the national board by regional director members.

At the meeting of the medical and scientific committee, which is composed of all of the professional members of the board of directors, it was announced that the University of Michigan had received four clinical fellowships from the American Cancer Society. Two were renewals and two were new, these are in the departments of medicine, surgery, radiology, and gynecology.

There are now sixty-eight members comprising the board of the American Cancer Society. Of these thirty-four are lay and thirty-four are professional.

Dr. William A. Hyland and Waldo Stoddard represented the Michigan Division as delegates to the annual meeting. Dr. Frank W. Hartman was the professional delegate and Arthur S. Albright a lay delegate from the Southeastern Michigan Division.

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PR REPORT

COUNTY MEDICAL SOCIETY public relations activities will get an unusually strong send-off for the new year, following the customary year-end switch of officers in many societies when the 1955 County Secretaries-Public Relations Conference is held on January 30. MSMS services available to county societies in the current 26-point PR program "Winning Friends for Medicine," will be stressed.

The tentative program for the conference will be found elsewhere in this issue. The Sheraton-Cadillac, Detroit, will be the setting.

A PREVIEW OF LEGISLATION pertaining to health and medical practice anticipated in the 1955 Session of the Michigan Legislature will be presented at the January 30 PR Conference. Now's the time, however, to become better acquainted with your representatives and state senators, and to offer the advice and co-operation of doctors of medicine in the home community on measures related to the health and physical welfare of the people of Michigan. A complete list of members of the 1955 Legislature and the current Michigan delegation in Congress will appear in the January Journal.

Washington trends and the outlook for health legislation in the 84th Congress were reviewed in Detroit, November 18, in a meeting between Cyrus Maxwell, M.D., of the AMA Washington office, and a representative group of MSMS members and officers. The background discussed at the meeting will serve as the foundation for MSMS action and policy decisions when the new Congress convenes.

NEWEST MEDICAL TV PROGRAM in Michigan is the 15-minute "live" show at 3:15 P.M. each Thursday over the WKAR-TV, the Michigan State College station in East Lansing which blankets a large portion of Central Michigan. Organized by C. G. Menzies, M.D., director of the hospital and health service at MSC, the program has strong support from members of the Ingham County Medical Society, and deals with many phases of health and medical care. College departments bordering on medical practice and research also aid Dr. Menzies in presenting the weekly show. The program is presented as a segment of the daily "Family Time" feature, with Kay Eyde acting as narrator who interviews Dr. Menzies and his guests.

One of the "men behind the scenes" in several successful MSMS projects was lost when Dale Rooks, of Grand Rapids, died November 19, 1954. Only thirty-seven years old, Mr. Rooks had gained national fame for his unusual and excellent photography. His fine photographs at the 1954 Michigan Clinical Institute (one of the last assignments he was able to fulfill before the discovery of advanced cancer of the lung) caught the mood of the occasion, as did his pictures of earlier Annual Sessions. The pictures will continue to be used in the future.

Mr. Rooks' illustrations in the oft-imitated MSMS recruitment brochure for medical associates, now in its third printing, are good examples of his work. He started as a photographer on the *Muskegon Chronicle*, moved to metropolitan dailies and *Look* magazine before establishing his own studio. During World War II, he was a Navy combat photographer.

THE NEW BEAUMONT MEMORIAL in Mackinac Island State Park, may draw 10,000 or more visitors each summer, as the popularity of the beautiful island grows, and as more travelers are drawn to the Northern and Upper Michigan area by completion of the Mackinac Straits bridge. That is the estimate of the men in MSMS closest to the Beaumont Memorial, presented to the people of Michigan by the medical profession last summer. In the short 1954 season—from the dedication July 17 to September 7—the memorial attracted 3,999 visitors.

PROBLEMS OF AGING

Problems of aging have been ignored completely by our medical schools as well as by organized medicine. The potentials for living longer should be explored. Maintenance of health, vitality and high motivation of senior citizens is a major challenge to medical science. Edward L. Bortz, *Past-President, A.M.A., Philadelphia Med.*, Oct. 8, 1954.



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AMA Washington Letter

THIS MONTH IN WASHINGTON

With the change in control of Congress, there naturally will be a major reshuffling of all committees, including those handling medical and health legislation. A new chairman moves to the top, and at the bottom a few Republican members drop off, to be replaced by an equal number of Democrats. In a Congress so evenly divided, domination of this committee machinery is a vital asset.

A majority of the Democrats taking over committee chairmanships in January will be returning to the same jobs they held when their party was in power before, but the situation is a little different on the two committees most important in health and medical legislation. It will be the first time either of these chairmen has had the responsibility of running the full committee, although both have been involved in medical legislation for many years. Both are veteran legislators and are Southerners. They are Senator Lester Hill of Alabama, who replaces Senator H. Alexander Smith of New Jersey as chairman of the Labor and Welfare Committee, and Rep. Percy Priest of Tennessee, who succeeds Chairman Charles Wolverton, also of New Jersey, on the Interstate and Foreign Commerce Committee.

By reason of seniority, Senator James Murray of Montana is in line for the Labor and Welfare Committee chairmanship. However, he has announced that he prefers to run the Interior and Insular Affairs Committee, thus turning over the other chairmanship to Senator Hill. Senator Murray, as a sponsor of national compulsory health insurance, and as a chairman and member of its committee that held such turbulent hearings on this subject, became well known to the medical profession.

Senator Hill, the son of a physician, has been in Congress for thirty years—fourteen in the House before he came to the Senate. He was a co-sponsor of the Hill-Burton hospital construction program, perhaps the most important piece of medical legislation enacted since World War II.

Presumably the Senate committee's Health Subcommittee again will be headed by Senator Herbert Lehman of New York, who handled this task during the last Democratic Congress, the 82nd. Last session the Health Subcommittee chairman was Senator William Purtell of Connecticut.

Priest is a former school teacher and newspaperman. He has been in the House for seven uninterrupted terms. In 1951 he was chairman of the Commerce Committee's Health Subcommittee; the subcommittee system was abolished by the committee in 1952. Since then he has taken an extremely active part in committee work in the health and medical fields.

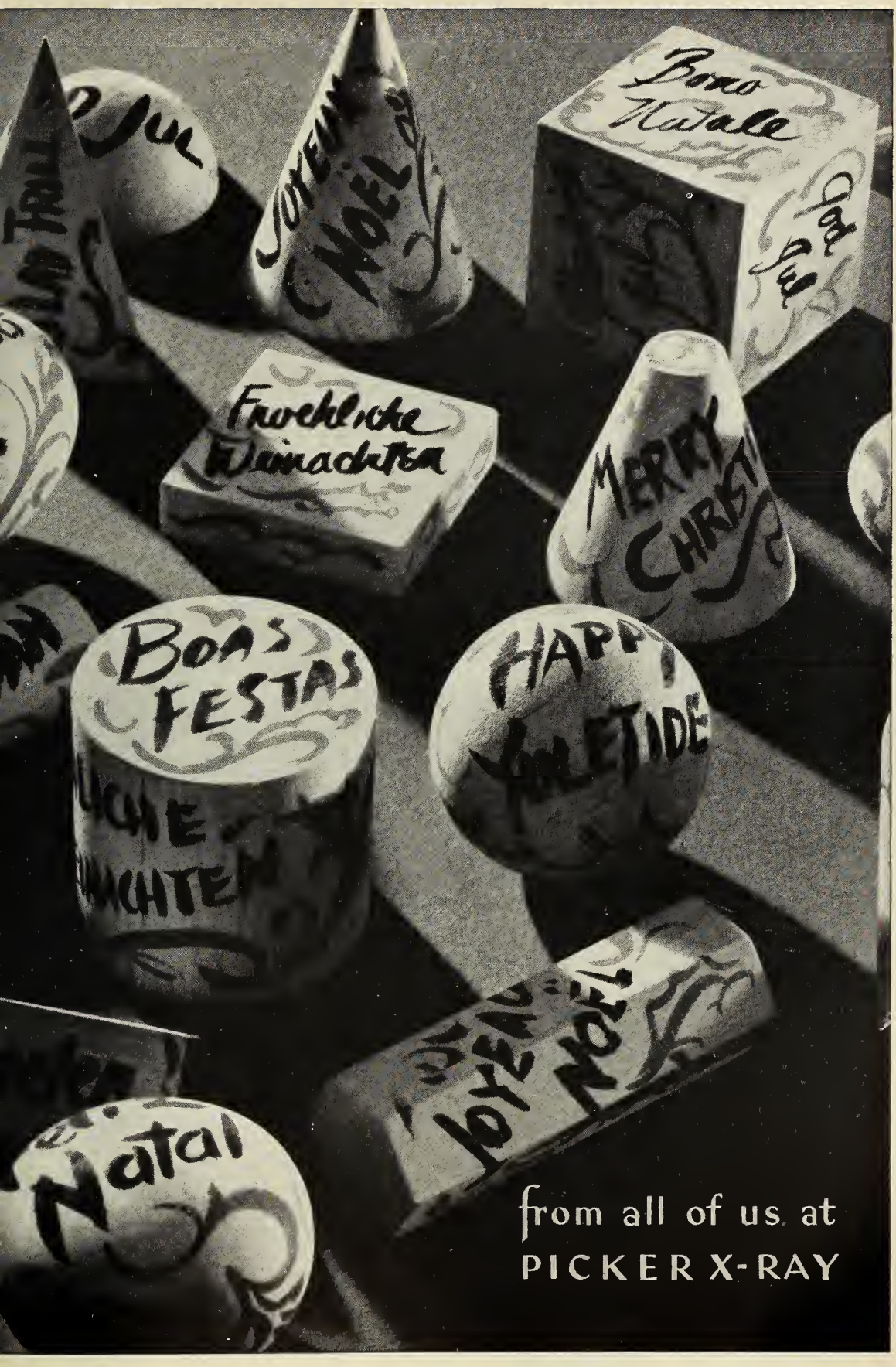
The Hill and Priest committees will handle most health legislation with the exception of military, veteran and appropriation bills. For example, they will be in charge of resinsurance if it is reintroduced, as well as most health-medical bills originating in the Department of Health, Education and Welfare.

A number of other committee changes of importance to medical legislation are scheduled. Rep. Edith Nourse Rogers of Massachusetts, a veteran of 29 years in the House, loses the chairmanship of the Veterans Affairs Committee. She is being succeeded by Rep. Olin Teague of Texas, who was elected to Congress for the first time while he was completing his six-year Army duty in 1946.

The House Appropriations Committee chairmanship goes from Rep. John Taber of New York to Rep. Clarence Cannon of Missouri; both have the reputation of being economy-minded. Of considerable significance in medical appropriations is the change in the chairmanship of the subcommittee that handles money for the Department of Health, Education and Welfare. The chairman for the last two years, Rep. Fred Busbey of Illinois, carefully scrutinized all health appropriations, and effected many reductions. He was defeated for re-election. The prospective chairman of the subcommittee, Rep. John Fogarty of Rhode Island, repeatedly has intervened in the committee and on the House floor to restore money cut out by the subcommittee.

Chairman of the Armed Forces Committee in the Senate—where medical care for military dependents would be taken up—will be Senator Richard B. Russell of Georgia, replacing Senator Leverett Saltonstall of Massachusetts. On the House side, the Armed Forces chairmanship goes to the veteran Rep. Carl Vinson, also of Georgia. He replaces Rep. Dewey Short of Missouri.

Any bills proposing reorganization of the executive departments will come before Chairman John L. McClellan of Arkansas in the Senate and Rep. William L. Dawson of Illinois in the House. They are succeeding Senator Joseph R. McCarthy of Wisconsin and Rep. Clare E. Hoffman of Michigan.


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Editorial Opinion

A RESPECTED MAN

The Knights of Columbus performed a fine service Wednesday night when they held a special dinner to honor Dr. Thomas E. Hackett.

The Knights said, "Thank you," on behalf of the entire community to one of the fine, venerable physicians who, during all of his long and useful life, has lived up to the great traditions of the medical profession.

Dr. Hackett is typical of those physicians who are dedicated to the belief that people in trouble should have help no matter what time of day or night it might be. When the call comes he responds, even though it means getting out of bed after a tiring day or breaking into a pleasant social evening. He probably would have walked out on his own testimonial dinner if his services had been needed.

His type of dedication to service is something that some of the younger members of the profession seem to lack—or perhaps their schools fail to instill in them the spirit of men like Dr. Hackett.

In recent weeks Jackson has seen two examples of the results of the deterioration of the traditions which are respected by Dr. Hackett and his contemporaries. A Jackson man died in the jail at Mason after a doctor failed to come and examine him when called. Another resident of the city died of a heart attack in a tourist court at Louisville, Kentucky. Five doctors were called to treat him, but none came.

The men who are following in the footsteps of Dr. Hackett and others of his years would do well to hold him up as a model of service to humanity.

And we are glad to see that the Knights of Columbus saw fit to tell Dr. Hackett just how much the community respects him.—*Jackson Citizen Patriot*, October 29, 1954.

STUDENTS VISIT RESEARCH LABORATORIES



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The JOURNAL
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Enzymes in the Mechanism of Inflammation in the Rheumatic Disorders

By Earl A. Peterman, M.D.
Detroit, Michigan

ENZYMES are biological substances which add vitality to the otherwise rather inert chemical compounds forming all living matter. They are the sparks which kindle the reactions characteristic of life. In their presence, otherwise inert and stable biochemical compounds undergo oxidations, reductions, condensations, hydrolyses and syntheses with rapidity and ease. Most of these reactions take place inside the cell, which in reality is a tiny but orderly chemical factory with specialized activities taking place simultaneously in various parts. Just as the cell is the chemical workshop, the enzymes are the chemical workers, while the hormones are the overseers who order the job done, but take no part in its execution.

It can now be demonstrated that at least two groups of enzymes play important parts in the development of incipient rheumatic disease. The first group comprises the thromboplastins, which are found in every cell in the body, as well as free in the extracellular fluid and the circulating plasma. These substances are phospholipoproteins —composed of complex molecules whose exact chemical constitution is unknown. The cells of each tissue in the body appear to have a thromboplastin in part peculiar to the metabolic needs of that tissue.

The second group of enzymes are glycoproteins, comprising the hexose polysaccharide sulfate esters which are closely related to and probably identical with the sulfuric acid esters of the glycoproteins which form the heparin spectrum. First isolated from the liver by McLean[16] in 1916, this mixture of esters was later given the name "heparin" by Howell and Holt.[10] Chemically, these substances are known to be constructed in chain fashion with molecules of glucuronic acid alternating with molecules of glucosamine, but wide variation in the length of the chain has frustrated every attempt to isolate a single ester for purposes of standardization.

Observations on the mechanisms involved in the genesis of the inflammatory process of rheumatic disorders indicates that rheumatic disease finds its origin primarily in disordered enzyme functions.

A Working Concept

Enzymology is the only remaining field as yet unexplored in the etiology of rheumatic disease. In recent years, evaluation of the hormones, cortisone and corticotropin, has led to the conclusion that they take little or no part in the actual pathogenesis of rheumatic disease. They do appear to have some value in treatment, probably because, as rheumatic disease progresses, certain relative hormonal deficiencies develop.

Prior to evaluation of the hormones, the vitamins were studied extensively. Vitamin D especially was used in large amounts, with apparently good results in some cases and with disastrous results in others. The treatment of rheumatic disease with large quantities of vitamin D, is now generally not accepted. During this

From the Department of Clinical Pathology, Providence Hospital, Detroit.

As used in this study protamine sulfate, trypsin, hexose polysaccharide sulfate esters as "Polyheparin" and thromboplastin as "Thromboplex" were supplied by Drug Industries Co., Detroit, Michigan.

same period, the allergenic theory gained the height of its prominence. According to this concept, susceptible tissues are rendered hypersensitive by some antigen, such as the protein fraction of bacteria, and these tissues then react to any subsequent stimulus by an allergic inflammatory response. In reality, then, the allergenic theory was an outgrowth of the theory of infectious etiology. Even today, many competent observers hold widely divergent opinions as to the possible role of allergy in the pathogenesis of rheumatic disorders.[14]

Infections in the etiology of rheumatic disease held the attention of investigators longer than any other concept. Since the advent of the sulfa drugs, the antihistamines and the antibiotics, it has become increasingly apparent that the type of inflammation seen in these disorders is not primarily allergic or bacterial in origin. It is true that rheumatic disease in the majority of cases appears to have bacterial and allergic etiologic components, but the best evidence of late gives these factors a secondary role. At some time in its course, practically every case of rheumatic disease is complicated by superimposed bacterial infection which enhances the underlying pathology; nevertheless, infection is properly viewed as a precipitating or aggravating factor rather than as the primary cause.

Widespread use of antibiotics has eliminated the last vestige of the theory that infection causes rheumatic disease. It is now clear that infections only aggravate rather than cause clinical rheumatic disease in patients whose underlying rheumatic state is already well advanced. There is abundant evidence that no significant difference exists between the incidence of focal infection in rheumatic patients and that of patients without rheumatic affections.[2] Chronic foci of infection are often seen in large groups of patients without rheumatic troubles, and likewise many patients affected with one of the rheumatic disorders show no evidence of a focus of infection. Removal of teeth and tonsils in rheumatoid arthritics, regardless of whether or not there is clear-cut evidence of septic pockets, is not usually accompanied by significant improvement in the condition of the patient's arthritis. A growing volume of literature, however, shows that control of infection with sulfa drugs and antibiotics reduces the severity of attacks of rheumatic disease. The progress of the disease is thus markedly retarded but it is not brought to a complete standstill. Even though infections and allergies are completely controlled and other factors adjusted, such as a relative deficiency of vitamins and hormones, the basic rheumatic disorder may still continue in the form of active carditis, joint and neuromuscular involvement.

The basic rheumatic lesion then is intrinsic and can develop without any outside help whatsoever. It is metabolic in origin and therefore not primarily affected by the antibiotics, sulfa drugs or antihistamines. It can now be demonstrated that this intrinsic inflammatory process in the connective tissues is a physiologic reaction generated by the excessive and devastating withdrawal of enzymes from the tissues, and that the reaction can be specifically reversed by replacement therapy with homologous enzymes of the thromboplastin group (Case 1, Fig. 3).

It can further be demonstrated that, while the clinical lesion is produced by a thromboplastin deficiency, the depleting agent appears to be heparinoid toxin. Neutralizing this toxin with protamine sulfate will also reverse the physiologic inflammatory reaction because, in the absence of the poison, the thromboplastin recovers spontaneously (Case 5, Fig. 7).

In addition to these two defects in rheumatic disease, a deficiency of normal heparins (hexose polysaccharide sulfate esters) can be demonstrated.[19] Replacement therapy with these substances, which act as enzymes, may reverse the basic disease process because their admistration not only suppresses the physiologic stimulus for the production of normal heparins within the body but also the formation of their toxic homologue, heparinoid toxin, thereby allowing the natural thromboplastin mechanism to recover (Case 3, Fig. 5).

While the enzyme mechanisms in the inflammatory process of incipient rheumatic disease can be demonstrated in still other ways, the above examples serve to emphasize the three main factors involved: (1) a deficiency in the thromboplastin mechanism, (2) the production and accumulation of heparinoid toxin, and (3) a deficiency in the hexose polysaccharide sulfate esters (heparins). These observations support the view that rheumatic disorders take origin from an intrinsic error in the biosynthesis and metabolism of the hexose polysaccharide sulfate esters. This defect may be somewhat analogous to the intrinsic error in the metab-

olism of purines and the biogenesis of uric acid in gout.

The heparin spectrum is composed of many hexose polysaccharide sulfate esters, each varying from the other in the length of the chemical chain. There is definite evidence in rheumatic disease of the formation of abnormal heparin-like esters which are toxic rather than physiologic, and, at the same time, a deficiency of the normal physiologic forms.[19] The toxic esters simulate their physiologic counterparts in their ability and strong tendency to inactivate thromboplastin. Being toxic, they are not consumed physiologically; hence they accumulate and deplete the thromboplastin mechanism. The intrinsic error in the formation of the normal esters may be a simple primary deficiency which acts as a physiologic stimulus for the formation of the toxic variety. Regardless of the mechanism, the toxic ester, according to our observations, is the substance responsible for depletion of the thromboplastin mechanism. These observations also show that the chain of events in the etiologic, metabolic triad is first a deficiency of normal heparin esters associated with an accumulation of heparinoid toxins, and finally exhaustion of the thromboplastin reservoir of the body.

As previously indicated, the exact chemical configuration of natural heparin remains uncertain. Heparin is a complex mixture of the esters of glucuronic acid and glucosamine linked in chain fashion in tetrasaccharide groups. The chain length is subject to considerable variation but viscosity data suggest it rarely if ever exceeds 200 anhydrohexose units,[28] a length sufficient to permit considerable latitude for variation.

Heparin esters are not confined to the animal kingdom; they are also distributed rather widely throughout the plant world. Although too toxic for medicinal use, the plant esters share with heparin the basic feature of anticoagulant action by virtue of their ability to inactivate thromboplastin. The existence of such esters among plants makes it easier to comprehend how heparinoid toxins can at times occur in animal metabolism.

The demonstration that heparin functions as an enzyme as well as an anticoagulant was first made in 1952 by Morrione.[17] By electron microscopy, he showed the action of heparin in reconstituting collagen fibers, indistinguishable from the original, in a solution of collagen derived from connective tissue of the rat's tail. The reconstituted fibers resembled the normal variety even in their pattern of cross striations. Whether heparin functions only as a catalyst in the observations herein described, is not entirely proven, but certainly the magnitude of the biochemical reaction noted from such small amounts of the substance argues against its entering into these biological processes stoichiometrically,

The Etiologic Triad

Recent studies[18,19,20] indicate that three factors are combined in the fundamental pathogenesis of the rheumatic disorders: (1) an insufficiency in the thromboplastin mechanism, (2) the presence of heparinoid toxin, and (3) a deficiency in the hexose polysaccharide sulfate esters.

1. *Insufficiency in the thromboplastin mechanism.*—Thromboplastin is a ubiquitous enzyme in the body. It is found in the cells, tissue fluids and in the circulating plasma. In the cells, this enzyme or group of enzymes actively participates in intracellular metabolism while, in the plasma, it aids in the homeostatic regulation of blood coagulation. At the same time, an active metabolic exchange is maintained between extracellular and intracellular thromboplastin. The normal equilibrium of each of these functions of thromboplastin is greatly disturbed in rheumatic disorders by the destructive action of a heparin-like toxin, the presence of which has been previously demonstrated.[19] The heparinoid toxin threatens the integrity of normal clotting time by its inactivation of circulating thromboplastin. Plasma fibrinogen increases as a compensatory measure to protect and maintain the life-saving mechanism of normal clotting. At the same time, the decrease in circulating thromboplastin upsets the normal equilibrium between its extracellular and intracellular concentrations. In the presence of this negative balance, thromboplastin is withdrawn from its intracellular depots. The vital metabolic functions of the cells are thereby placed in jeopardy and there ensues among the cells a metabolic struggle for survival. This is the fundamental, intrinsic inflammatory reaction characterizing the presence of rheumatic disease. It may exist in all degrees of intensity probably because the rate of metabolic exchange of thromboplastin varies from time to time and from one connective tissue to another.

2. *Presence of heparinoid toxin.*—A characteristic part of the rheumatic disease process is a marked increase in the plasma fibrinogen level.

Administration of protamine sulfate reduces this hyperfibrinogenemia. This fact strongly indicated that some member of the heparin family, with which protamine reacts most readily, in some manner caused the increased fibrinogenemia. Testing this theory, our studies[18,19] showed that the etiologic agent in the production of hyperfibrinogenemia rather than being normal heparin was a heparin-like substance which was toxic and incapable of participating in normal body physiology. Being toxic and nonphysiologic, it tends to accumulate and, because it bears the strong antithromboplastic qualities inherent in members of the heparin group of substances, it acts continually to deplete the thromboplastin mechanism.

3. *Deficiency of physiologic heparins (hexose polysaccharide sulfate esters).*—Studies with physiologic hexose polysaccharide sulfate esters showed them not to be implicated directly in the production of the hyperfibrinogenemia characteristic of rheumatic disorders. On the contrary, these esters of the heparin spectrum showed a marked tendency to reduce the fibrinogen level which had been elevated by rheumatic disease. It thus appeared that an actual deficiency of heparin esters might be the primary defect responsible for initiating the disease syndrome. Interpretation of the data further indicated that one and the same intrinsic error in the biogenesis of heparins accounted for the presence of an associated heparinoid toxin either simultaneously or as a direct result of the normal heparin lack. Replacement of the heparin deficiency by exogenous heparin reduces the fibrinogen level[19] previously elevated by disease (Case 3, Fig. 5). This fact suggests that exogenous heparin retards the production of endogenous heparin and, at the same time, abolishes the synthesis of heparinoid toxins. Once production of heparinoid toxin is halted, the thromboplastin mechanism recovers spontaneously, as shown by the return of the plasma fibrinogen to normal levels.

The physiologic sequence of events apparently begins with a single defect which is thought to be an intrinsic error in the biogenesis of hexose polysaccharide sulfate esters. This error gives rise to a deficiency of these substances and also to the production of heparinoid toxin which in turn depletes the thromboplastin mechanism, thus completing the etiologic triad.

The Plasma Fibrinogen Level as a Measure of Rheumatic Disease Activity

Progress in the scientific analysis of rheumatic disorders requires a reliable method of measuring some characteristic portion of the disease process. Until recently, the erythrocyte sedimentation rate served more or less empirically in this capacity, under the misconception that infection, either evident or occult, played a conspicuous role in the pathogenesis of rheumatic disease.

Since Westergren's[27] original work in 1921, which showed that erythrocytes settled at an increased rate in pulmonary tuberculosis, the sedimentation rate has been employed extensively in clinical practice. As long as rheumatic disease was considered to be of infectious origin, it was logical to regard the sedimentation rate as an important index of rheumatic activity. In recent years, however, effective control of infection has provided overwhelming evidence that rheumatic disease can, and usually does, continue after the infection has been stamped out and in many cases a normal sedimentation rate re-established. Many investigators have failed to link the rate of sedimentation with anything more than plasma viscosity and the ability to produce rouleaux formation, with the rate of settling primarily dependent on the size of the red cell aggregates. Although empiric determination of this rate has a value established in clinical experience, as an indicator of the presence of infection, investigators have been unable to correlate it with any other factor associated with rheumatic disease. For these reasons, the sedimentation rate cannot be considered a reliable measure of rheumatic activity.

On the other hand, an elevated plasma fibrinogen level is associated with rheumatic disease regardless of the presence or absence of infection. Determination[23] of fibrinogen furnishes an indirect measure of the functional capacity of the thromboplastin mechanism. Since a deficiency of thromboplastin is an early etiologic event, the measurement of fibrinogen furnishes an indirect but remarkably valuable index of the disease process almost from the beginning. It is true that this criterion mirrors but a portion of the disease process but, in so doing, it adds greatly to the scientific analysis of the disease as a whole.

In the process of blood coagulation, plasma fibrinogen is the main target for the action of thromboplastin as illustrated in Figure 1. The

maintenance of normal clotting time is a life-preserving mechanism constantly guarded by the natural balance between fibrinogen and thromboplastin. Anything affecting the efficacy of the repeatedly into the blood, the thromboplastin is eventually completely exhausted and, although the fibrinogen level climbs to great heights, it can no longer maintain normal clotting time, with the

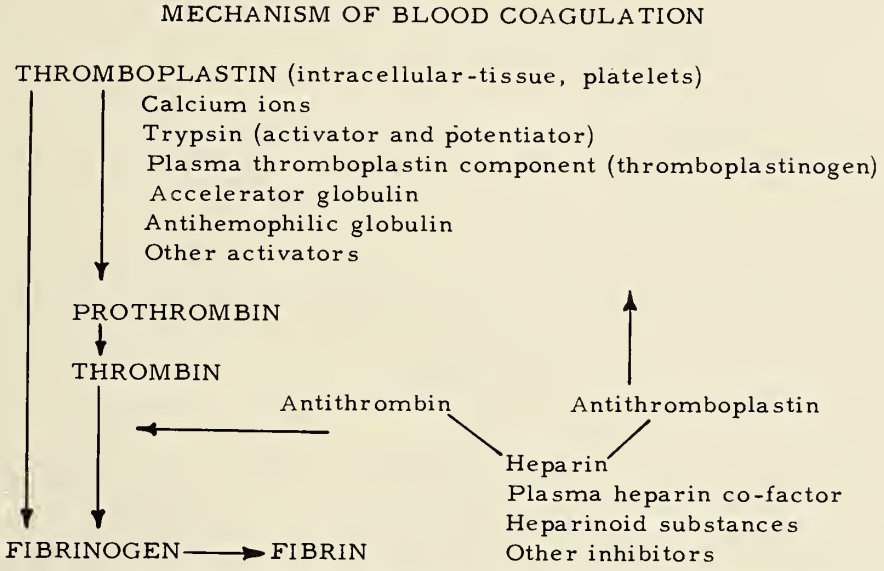


Fig. 1. Fibrinogen is the main target for the action of the very complex thromboplastin mechanism in the process of blood coagulation.

thromboplastin mechanism in its ability to convert fibrinogen to fibrin is immediately registered by a shift in the plasma fibrinogen level. Interference with the normal balance of thromboplastin results in immediate and commensurate elevation of the level of fibrinogen to compensate for the compromised ability of thromboplastin to maintain a normal blood clotting time. Conversely, support rendered a weakened thromboplastin mechanism will immediately bring the level of plasma fibrinogen down. This homeostatic mechanism is illustrated in Figure 2.

Many substances are now known to be capable of causing shifts in the plasma fibrinogen level because of their action on the thromboplastin mechanism. The natural anticoagulants, the hexose polysaccharide sulfate esters comprising the heparin spectrum, play an important part in homeostatic regulation of coagulation of the blood. Being natural anti-thromboplastins, these substances, when they accumulate in more than physiologic amounts, depress the thromboplastin mechanism, and this decline in turn stimulates a compensatory rise in the level of plasma fibrinogen—just enough to maintain normal clotting time. When excessive amounts of natural heparin esters are injected result that a hemorrhagic state ensues.[21]

The homeostasis of blood coagulation is also affected by other biological substances such as protamine sulfate. This substance, when administered in sufficient quantities, is known to inactivate thromboplastin. It carries the heaviest positive charge of any known biological substance and, since the hexose polysaccharide sulfate esters carry the heaviest negative charge, protamine sulfate will selectively react with heparin in preference to thromboplastin. Once the heparin esters are neutralized, protamine sulfate will attack thromboplastin, weakening its mechanism and instigating the compensatory rise in the level of plasma fibrinogen. The reciprocal shift in the levels of these two enzymes however succeeds in maintaining normal clotting time until the thromboplastin mechanism is completely nullified by the protamine sulfate when a hemorrhagic state supervenes.

Dicumarol influences blood clotting by virtue of its effect on a portion of the thromboplastin mechanism. Rather than attacking thromboplastin directly, dicumarol weakens its normal mechanism by inactivating vitamin K, a substance necessary to the formation of prothrombin. Even though

the cause of imbalance differs from that of the preceding example, the effect is similar in that fibrinogen rises to compensate for the depression of thromboplastin. Continued administration of diversed by adequate administration of homologous thromboplastin. Later in the disease, it becomes necessary to control the other factors in the etiologic triad as well.

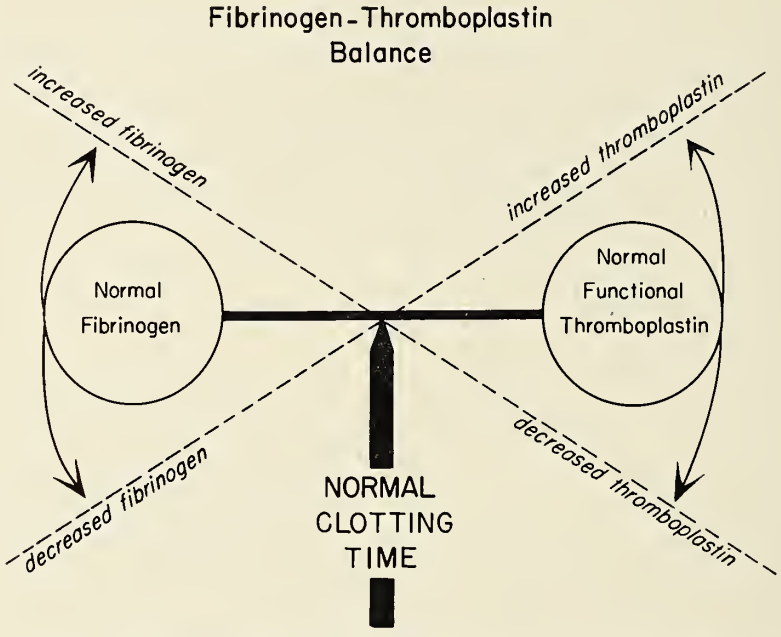


Fig. 2. The hemostasis of blood coagulation centers on the normal clotting time as a fulcrum. Anything which weakens the functional capacity of thromboplastin causes a rise in the level of fibrinogen, and anything potentiating the functional thromboplastin lowers the fibrinogen level. This mechanism forms the basis for using the plasma fibrinogen levels as the preferred index of rheumatic disease activity.

cumarol[21] will completely inactivate the thromboplastin mechanism and, as we have noted, when this occurs, a hemorrhagic state results in spite of great elevation in the level of plasma fibrinogen.

Thus it is seen that hexose polysaccharide sulfate esters, protamine sulfate, heparinoid toxin and dicumarol are among the substances which elevate fibrinogen in the plasma by reducing the functional capacity of the thromboplastin mechanism. By the same token, other substances which support the thromboplastin mechanism, after it is weakened by disease, will bring about a compensatory drop in the level of plasma fibrinogen. Of these latter substances, homologous thromboplastin itself heads the list. The dramatic reduction of hyperfibrinogenemia in early rheumatic fever following administration of thromboplastin can be easily demonstrated.[20] Particularly in the early phase of rheumatic fever, before the etiologic chain of events has progressed too far, depletion of the thromboplastin mechanism is readily re-

Associated with the effect of thromboplastin on the level of plasma fibrinogen is another enzyme, trypsin. In 1948, Ferguson, Travis and Gerheim[5] showed that trypsin activated and potentiated thromboplastin. This action of trypsin is reflected by a drop in the plasma fibrinogen level which is illustrated by Case 4 and Figure 6.

Protamine sulfate, used to neutralize the accumulation of heparinoid toxin in rheumatic disease, will reduce the plasma fibrinogen level. This is achieved by removing the toxic suppression of the thromboplastin mechanism which then recovers spontaneously. As this occurs, the fibrinogen drops to a lower level commensurate with the increased potency of the thromboplastin (Fig. 7). The heparin esters, when used to replace a deficiency of these substances, also produce a drop in the level of plasma fibrinogen.[19] This effect is brought about because the production of heparinoid toxin which accompanies the heparin deficiency is halted once the original deficiency is relieved (Case 3, Fig. 5).

These observations which tie the plasma fibrinogen level directly to the activity of the thromboplastin mechanism, are important because a deficiency of thromboplastin is a part of the etiologic triad of rheumatic disease. Determination of the plasma fibrinogen level therefore serves as the best available index of the presence and the intensity of rheumatic disorders.

Physiologic Balance With Enzymes in the Control of Rheumatic Disorders

The rheumatic disorders are caused by what appears to be an inherent metabolic defect in the production of certain enzymes, the hexose polysaccharide sulfate esters. As previously explained in some detail, this defect is accompanied by the production of closely related esters which are toxic (heparinoid toxin) and which deplete the thromboplastin mechanism.

Control of rheumatic disorders with enzymes is accomplished by restoring the normal physiologic balance of these various substances after infectious and other exogenous factors have been corrected. All three factors of the etiologic triad must be considered. The deficiency in the heparin esters must be made up, the heparinoid toxin must be neutralized or its formation prevented, and the deficit in thromboplastin must be rectified either by aiding its spontaneous recovery or by replenishing it from the outside. The relative importance of these three factors varies considerably with each individual and, as a consequence, wide clinical variations are encountered in rheumatic disease. The clinician must learn to estimate the importance of each factor in order to establish proper balance. For example, an extremely high level of plasma fibrinogen indicates an unusually large amount of toxin which must be neutralized with protamine sulfate before attempting physiologic balance with enzymes. At the same time, the elevated fibrinogen may also indicate the extent of the deficiency of the heparin esters which may require more of these substances to affect a proper balance. Experience teaches the clinician the value of each variation, and good clinical control may be quickly obtained by their proper evaluation.

For these reasons, therapeutic measures must be guided by the overall view in which each of the factors in the etiologic triad is given adequate consideration. However, in order to demonstrate more clearly the physiologic effect of individual enzymes, they were administered individually during the early phase of treatment, as illustrated by the following case reports. Proper physiologic balance cannot thus be maintained indefinitely; therefore, after adequate therapeutic trial with one agent, the other factors were then balanced for continued therapeutic maintenance.

Case Reports

Case 1.—Robert H., a ten-year-old boy, was admitted to Providence Hospital on April 23, 1953, complaining of pain in the knees, ankles and wrists. His present illness began two months previously when he was confined to bed as a result of a number of complaints including pain in the joints, loss of appetite, irritability, a tired feeling and disinclination to play with other children. His temperature and pulse rate had both persisted at an abnormally high level.

Physical examination disclosed a pale and acutely ill boy. The respiratory rate was twenty per minute, pulse rate 140, and the temperature registered 104 degrees. Ears, nose and throat were normal. The lungs were resonant throughout. The heart showed no enlargement and maintained a normal rhythm but with appreciable sinus tachycardia. The abdomen was soft, scaphoid and showed no masses. As for the extremities, the knees were slightly swollen, and both ankles and knees were painful on movement.

Laboratory studies gave the following values: hemoglobin, 14.3 gm. per 100 cc.; erythrocytes, 4,800,000 per cu. mm.; leukocytes, 9,000; neutrophils, 79 per cent; lymphocytes, 20 per cent; eosinophils, 1 per cent; sedimentation rate, 33 mm. in the first hour; plasma fibrogen, 430 mg. per cent; platelets, 327,000 per cu. mm. Urinalysis was normal.

On the basis of these findings, the admitting diagnosis of rheumatic fever was confirmed.

Treatment consisted of administering thromboplastin rectal suppositories of 50 mg. each three times daily.

By the eighth day of treatment, the temperature, pulse rate, sedimentation rate and plasma fibrogen level had all returned to normal. Pain in the joints and knee swelling had cleared completely. The patient's appetite became good and he resumed normal ambulation without further trouble. On the sixteenth day following admission, he was sent home. Figure 3 graphically presents the dramatic physiologic effect of replacement therapy and illustrates the specific antiphlogistic action of thromboplastin in reversing the basic and intrinsic inflammatory lesion in rheumatic fever.

In a followup examination on May 16, 1953, one week after leaving the hospital, the patient again complained of lack of appetite, constipation and fatigue. Further studies at this time revealed a sedimentation rate of 34 mm. and a plasma fibrinogen level of 1140 mg. per cent. In place of one of the three daily thromboplastin suppositories, the patient was given a suppository containing 20 mg. polyheparin.

Examination a week later, on May 23, showed the patient had regained his good appetite and had lost his

constipation and tired feeling. The sedimentation rate and plasma fibrinogen level had returned to normal.

Comment.—This ten-year-old boy had been confined to bed for two months prior to admission, under the eare of a competent pediatrician. Bed rest, antibiotics and salicylates had failed to control the temperature and pulse rate. The former had been rising to 104 and the latter had risen to 150 per minute. Upon admission to Providence Hospital, the child appeared to be in greater distress than observation of the sedimentation rate and plasma fibrinogen level indicated. Since the sedimentation rate reflects the physiologic response to infection, which in this patient had been controlled with antibiotics, the low value for this index was to be expected.

The plasma fibrinogen, which may be elevated by either exogenous or endogenous inflammatory processes, was definitely increased. Since the exogenous component had been eliminated by the use of antibiotic therapy, the increase shown in the level of plasma fibrinogen at the time of admission reflected only the endogenous component. Under these conditions, according to the enzymogenic concept, the elevated level of fibrinogen indicated a deficiency of the enzyme, thromboplastin. The elevation of temperature, pulse rate, sedimentation rate and fibrinogen can all be explained on this basis. Figure 3 graphically presents the dramatic effect of administration of thromboplastin upon all these indices.

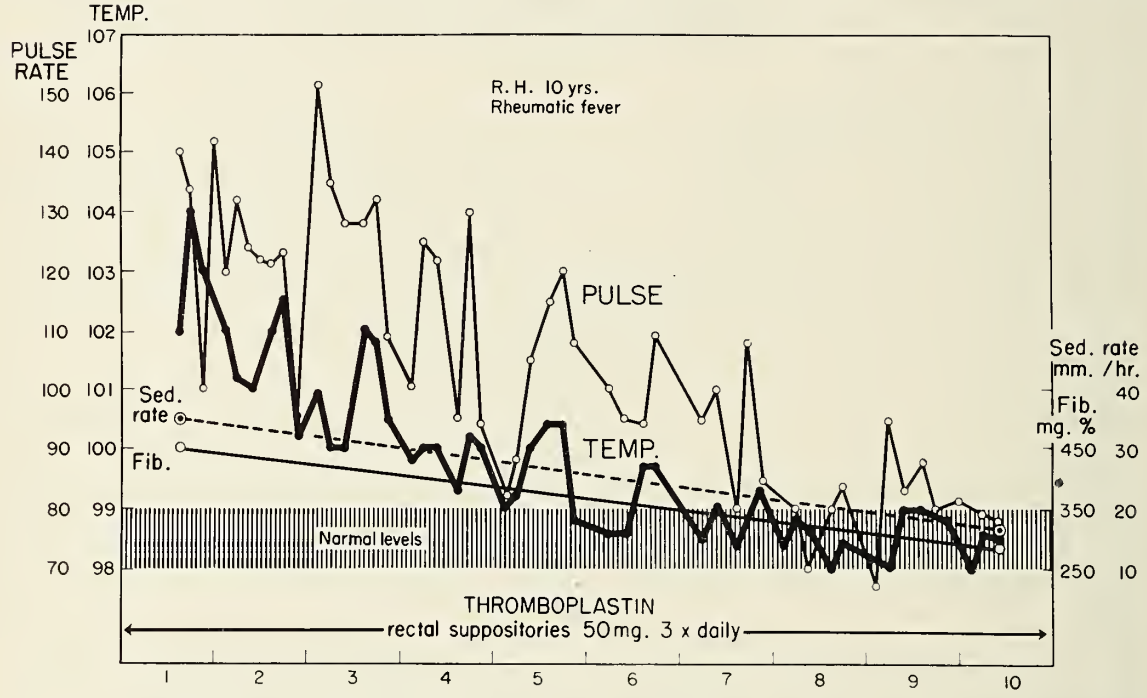


Fig. 3. Physiologic effect of thromboplastin on the pulse rate, temperature sedimentation rate and plasma fibrinogen level in a ten-year-old boy with acute rheumatic fever. Thromboplastin was given after two months of bed rest, antibiotics and salicylates had failed. This case demonstrates the specific antiphlogistic effect of thromboplastin in reversing the basic and intrinsic inflammatory process.

The child appeared clinically well after the first week of treatment. He returned to normal activities and was discharged from the hospital to continue treatment at home. Within a week after leaving the hospital, he again became irritable and lost his appetite. Examination at this time revealed that his sedimentation rate had increased to 34 mm. in the first hour and his plasma fibrinogen had increased to 1140 mg. per cent. Since it has been shown that the original defect in rheumatic fever is a deficiency of hexose polysaccharide sulfate esters along with the production of a heparinoid toxin, it was suspected that, in this patient, these two factors were actively disturbing the enzyme balance established by the administration of thromboplastin. Accordingly, the physiologic esters were added to the treatment. The patient's symptoms cleared promptly and his laboratory readings

again showed a normal physiological balance. He has been maintained by enzyme balance in normal condition for more than a year. During this year of maintenance therapy, absence of his former "colds" has been a marked feature. Furthermore, the boy has grown 2 inches in height in contrast to the half inch he grew during the year prior to his illness.

Case 2.—R.M.H., a six-year-old boy, was admitted to Providence Hospital on December 31, 1953. He complained of pains in the arms and legs, becoming more severe during the past month. He tired easily, had little appetite and showed no inclination to play with other children. Nervous and irritable, he cried frequently on slight provocation.

The family and past history revealed no rheumatic disease in the parents or other members of the immediate family. Delivery was normal. The patient had always lived in an upper flat. He had been immunized against whooping cough, diphtheria and tetanus, and vaccinated for smallpox. He had no history of childhood diseases. His tonsils were removed one year prior to this admission. The boy had, however, suffered from recurrent upper respiratory infections.

Examination revealed a slender, pale child with muscle soreness on manipulation but with no definite swelling of the joints. The respiratory rate was 20 per minute and the temperature varied from 99.4 degrees to 100.4 degrees. The inframandibular and post-cervical lymph glands showed slight enlargement. Tonsil removal apparently had been complete. The lungs were clear; the heart, although not clinically enlarged, had a short systolic blowing murmur at and around the apex.

The electrocardiogram revealed a sinus arrhythmia with a frequency of 100, a value considered to be within the normal range for a child of six years. Roentgenologic examination showed minimal clouding of the left maxillary sinus and an essentially clear right sinus. An accentuation of the peritruncal markings in the mediobasal portion of the right lung, indicating old upper respiratory infections, was also observed. No evidence of albumin or sugar was found in the urine which had a pH of six and specific gravity of 1.1015. Other measurements included hemoglobin, 12.3 gm., erythrocytes 3,880,000, leukocytes 5,600, lymphocytes 64, platelets 300,000. The rate of sedimentation was determined to be 41 mm. in one hour. Plasma fibrinogen was 421 mg. per cent (normal 250 to 350).

The diagnosis of incipient rheumatic fever, showing minimal chronic left maxillary sinusitis and low grade anemia, was made. The therapeutic regimen included (1) penicillin, 400,000 units intramuscularly every forty-eight hours for two weeks, (2) salicylates, (3) bed rest. The patient was discharged to continue treatment at home.

Approximately three months later, on April 10, 1954, the patient was readmitted to Providence Hospital. In the interval at home, he had finished the course of penicillin, followed by a short period of no antibiotic therapy, then taken a three-week course of chloromycetin, followed by a rest period of ten days, and finally a two-week course of aureomycin. Three months of bed rest, antibiotics, vitamins, salicylates and balanced diet resulted in no improvement.

Examination now showed a respiratory rate of twenty, pulse rate of 120, and temperature of 99.6 degrees. His muscles were still tender on manipulation but there was no sign of joint swelling. Lymph glands of the inframandibular and postcervical regions were barely palpable. The lungs were clear and the heart was not enlarged. The systolic blowing murmur at and around the apex of the heart had, however, markedly increased over three months previously.

Electrocardiographic studies revealed a slightly increased sinus tachycardia at 107 and a "QRS amplitude abnormally high in most precordial leads, suggestive of coving of ST in L2 and L3. These changes were not present in the electrocardiogram of January 5, 1954. Impression: toxic myocarditis." (F. J. Jarsen, M.D.)

Urinalysis was normal. Other laboratory measurements were as follows: hemoglobin, 13 gm.; erythrocytes, 4,340,000; leukocytes, 6,700; neutrophils, 34; lymphocytes, 64; platelets, 226,680; sedimentation rate, 30; plasma fibrinogen, 836; absolute eosinophil count, 300. Determination of minerals showed calcium to be present in a concentration of 11 mg. and phosphorus 5.2 mg. (normal 3 to 4 mg.). Total protein was 7.5, of which five was albumin and 2.5 globulin (A/G ratio of 2:1).

Treatment was again instituted on April 16, 1954. On this occasion, however, protamine sulfate was administered orally in the amount of 10 mg. at 10 a.m. and again at 6 p.m. Thromboplastin also was given orally in a dosage of 150 mg. at 2 p.m. and once more at 10 p.m.

Eight days later, on April 24, laboratory tests showed calcium at 11 mg., phosphorus at 4.5 mg., the sedimentation rate at 14 mm., and the level of plasma fibrinogen reduced to 276 mg. per cent. The rate of sinus arrhythmia had decreased to 80. "In comparison with the previous electrocardiogram, some increase in the degree of coving was evident in L3 with occasional auricular fibrillation and R waves showed otherwise no change. Impression: increased severity of toxic myocarditis." (F. J. Jarsen, M.D.)

Protamine sulfate therapy was discontinued on April 23 and two polyheparin tablets of 1,000 units each were given orally. On April 30, the sinus arrhythmia registered a rate of 100. Comparison of the electrocardiogram with the normal one obtained early in the disease on January 5, 1954, showed no significant difference (W. J. Briggs, M.D.). On May 3, hemoglobin had a value of 12.6 gm., erythrocytes 4,560,000, leukocytes 7,000, neutrophils 35, lymphocytes 58, platelets 351,120, sedimentation rate 16 mm. end plasma fibrinogen 336 mg. per cent. On May 5, the patient was discharged to continue treatment at home.

Comment.—Although this boy at the time of his first hospitalization, apparently suffered from incipient rheumatic fever, it was felt that lifting

the mild but chronic upper respiratory infection might allow the basic physiologic disturbance to automatically correct itself. Accordingly, he was sent home on a regimen of bed rest, antibiotics and salicylates.

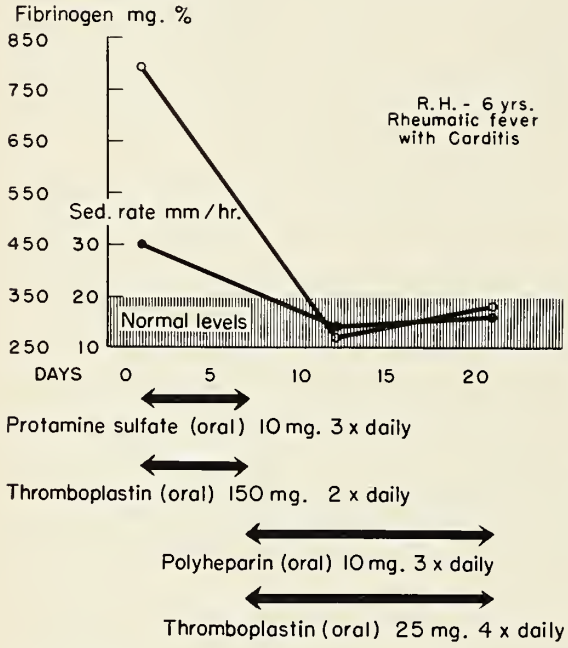


Fig. 4. Combined physiologic effect of oral protamine sulfate and oral thromboplastin—the former to neutralize heparinoid toxin and the latter to replace the thromboplastin deficiency on the plasma fibrinogen level in a six-year-old boy with acute rheumatic fever. Although he had received careful medical supervision during the three months prior to hospital admission, his rheumatic fever had grown worse. This case illustrates the principles of treating the triple defect of the etiologic triad: (1) Restore deficiency of thromboplastin, (2) restore deficiency of heparin esters, and (3) neutralize the heparinoid toxin.

Showing no improvement after three months, he was again hospitalized. The upper respiratory infection had cleared up but a low grade fever remained. The mitral murmur noted three months previously had definitely advanced and the electrocardiogram now revealed the presence of toxic myocarditis. Clearing the infections with antibiotic therapy had reduced the erythrocyte sedimentation rate from 46 to 30 mm. in the first hour, but the plasma fibrinogen during this same period had risen from 530 to 840 mg. per cent. This illustrates how a false sense of security may arise if one relies on the sedimentation rate as an index of rheumatic activity. At the same time, it shows how the plasma fibrinogen level clearly parallels the clinical condition of the patient, as verified by the electrocardiogram. These latter two indices were interpreted to indicate the presence of considerable amounts of heparinoid toxin. Consequently, protamine sulfate and large doses of thromboplastin were given to neutralize it (Fig. 4).

The result was dramatic. The level of plasma fibrinogen and the rate of sedimentation both returned to normal by the end of ten days of treatment. The heart sounds were greatly improved, even though evidence of toxic myocarditis persisted for two more weeks. After the first week of detoxication, the patient was given maintenance doses of oral thromboplastin and polyheparin which have kept his values for fibrinogen and sedimentation within a normal range. Carried on this regimen, he has remained free from rheumatic symptoms.

Case 3.—L.R.F., a fourteen-year-old boy was admitted to Providence Hospital on October 30, 1953, with complaints of pain in the joints, weakness and loss of appetite. The boy exhibited nervousness and uncontrollable muscular movement of the left arm. A persistent rash had been present for five months.

His past history included confinement to bed with chorea during the period from 1948 to 1949, when he received schooling at home. In May, 1953, he had pneumonia.

Examination revealed a thin, pale youth with a respiratory rate of twenty, a pulse rate of ninety-six and a temperature of 99 degrees. The lungs were clear, the heart showed no enlargement, but a systolic blowing murmur was heard at the apex and toward the axilla. The joints showed no sign of swelling but the muscles were tender to manipulation.

Nothing unusual was seen in the lung fields by x-ray examination. Blood measurements gave the following values: hemoglobin 15.6 gm., erythrocytes 4,800,000, leukocytes 6,400, neutrophils 55, lymphocytes 44, absolute eosinophil count 25 and platelets 290,000. The rate of sedimentation was 39 mm. and the reading for plasma fibrinogen 930 mg. per cent. L. E. cells were negative. Stool tryptic activity was normal as was the composition of the urine.

Treatment with oral heparin, 1,000 units three times daily, was begun on November 6, 1954. Three days later, on November 9, the sedimentation rate had declined to 8 mm. per hour and the plasma fibrinogen level had dropped to 333 mg. per cent (Fig. 5).

Comment.—This patient had spent much of the last four years in bed with rheumatic fever. Obviously ill on admission, he exhibited extreme nervousness and choreiform movements of the face, neck and arms. Important features of his clinical condition included an active carditis and chronic erythema marginata over the entire body. Exami-

nation revealed neither any aggravating infection nor an unduly high sedimentation rate. However, the level of plasma fibrinogen was so elevated as to indicate considerable depletion of the thromboplastin mechanism. Since his condition had probably developed over a long period of time, we chose to regard it as chronic and to plan replacement therapy over an extended period. Quite dramatically, on the institution of treatment, the plasma fibrinogen level and sedimentation rate dropped sharply to normal. The cardiac, dermatologic and central nervous manifestations did not appear to be immediately affected. As treatment continued, however, the nervousness and choreiform movements gradually subsided and the erythema faded out by the end of five months. The carditis apparently became inactive, leaving a residual mitral murmur which has not changed.

After the first two months, the rectal suppositories of thromboplastin were discontinued and thromboplex tablets were given orally instead. At the present writing, seven months of continuous treatment with oral heparin and thromboplastin has maintained normal erythrocyte sedimentation and plasma fibrinogen values. The patient is clinically well for the first time in five years.

This case illustrates, among other things, that the basic factor indirectly elevating plasma fibrinogen in rheumatic disease is a deficiency in the hexose polysaccharide sulfate esters (heparin). Oral administration of only 1000 units three times daily for a period of one week produced the profound drop in plasma fibrinogen and rate of sedimentation seen in Figure 5. This striking result further shows that heparin esters act as enzymes, as they apparently did in this case. Otherwise, if they entered into physiologic reactions stoichiometrically, the effects of such small amounts could probably not be measured.

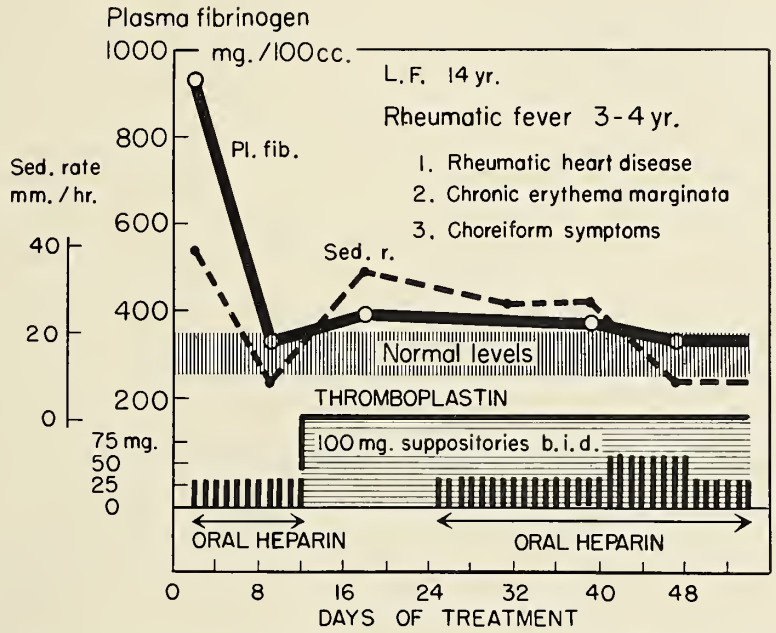


Fig. 5. Physiologic effect of oral heparin esters on the plasma fibrinogen level in a fourteen-year-old boy with chronic rheumatic fever. This case demonstrates the deficiency of heparin esters. It also shows how replacement therapy reduces or stops the production of heparinoid toxin. Note how both the fibrinogen level and the sedimentation rate were adjusted to normal by a temporary increase in the heparin esters during the period from the fortieth to forty-eighth day of therapy while the dosage of thromboplastin remained the same.

Data obtained from this patient also indicate that heparinoid toxin, which seriously impairs the thromboplastin mechanism, is produced in place of physiologic heparin. When the stimulus for production of endogenous heparins was suppressed by the use of exogenous heparins in this patient, the production of heparinoid toxin also ceased. This allowed recovery of the thromboplastin mechanism which as usual was accompanied by return of the

plasma fibrinogen to a normal level. If heparinoid toxin were produced secondarily by some mechanism other than that for the biogenesis of normal physiologic heparins, the administration of heparin would not reduce the plasma fibrinogen level.

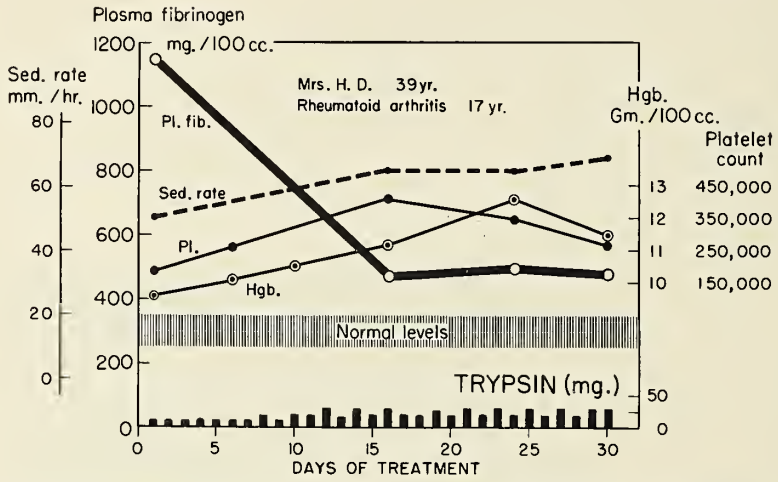


Fig. 6. Physiologic effect of trypsin on the plasma fibrinogen level in a thirty-nine-year-old housewife with rheumatoid arthritis for seventeen years. Trypsin activates and potentiates thromboplastin which in turn reduces the fibrinogen level by the mechanism shown in Figure 2.

Such a state would require direct neutralization of the heparinoid toxin by protamine sulfate or by homologous thromboplastin itself.

Treatment with heparin will not indefinitely maintain a normal plasma level of fibrinogen for the reason that heparins are also antithromboplastins. Once the deficit of heparin is made up, any additional amounts tend to deplete further the already weakened thromboplastin mechanism, causing the compensatory elevation of fibrinogen. Consequently, administration of heparin was discontinued on the eleventh day and then thromboplastin was given for an equal period of time. From this point on, both thromboplastin suppositories and oral heparin were administered. On the fortieth day, tests revealed some residual imbalance; therefore heparin was increased for eight days and, as a result, the indexes of rheumatic disease dropped to satisfactory levels. At the present writing, continued treatment has maintained this patient in satisfactory physiologic balance.

Case 4.—Mrs. C. D., a thirty-nine-year-old housewife with rheumatoid arthritis of seventeen years' duration volunteered to undergo a course of trypsin treatment.

The usual laboratory tests disclosed the following values: hemoglobin 9.6 gm., erythrocytes 3,342,000, leukocytes 9,200, neutrophils 67, lymphocytes 37, eosinophils 1, platelets 195,000, sedimentation rate 50, and plasma fibrinogen 1150.

Treatment which was begun on June 18, 1953, consisted of the injection of 10 mg. of trypsin in oil and 10 mg. given in rectal suppositories (Fig. 6).

For the first three weeks of trypsin therapy, the patient appeared to be greatly benefited and the plasma fibrinogen was gradually receding. Clinical improvement, however, was of short duration. During the fourth week, the patient definitely began to regress. She became extremely irritable, highly excitable, and emotionally and mentally unstable.

At this turn of events, trypsin treatment was discontinued and thromboplastin therapy instituted immediately. The patient regained her nervous and mental equilibrium within a few days but, because of this frightening experience, she refused to co-operate further with the study.

Comment.—The action of trypsin in this patient can best be understood on the basis of the work of Ferguson[5] who showed that trypsin activates and potentiates thromboplastin. In the present instance, the patient's level of plasma fibrinogen was greatly elevated as a result of rheumatic disease, and this indicated a depression of her thromboplastin mechanism. Potentiation of this weakened mechanism by trypsin reduced the level of fibrinogen in the plasma to a point beyond which thromboplastin could no longer be potentiated (Fig. 6). Even so, the thromboplastin mechanism was potentiated beyond its endurance, resulting in collapse of nervous and mental functions. The ad-

ministration of thromboplastin restored physiologic equilbrium promptly.

This case emphasizes the need for caution in the prolonged administration of trypsin unless it is accompanied by the administration of thromboplastin. The potentiating effect of trypsin on thromboplastin is somewhat analagous to applying the spurs to a tired horse—a burst of speed and then total collapse. Trypsin therapy alone should be only of short duration.

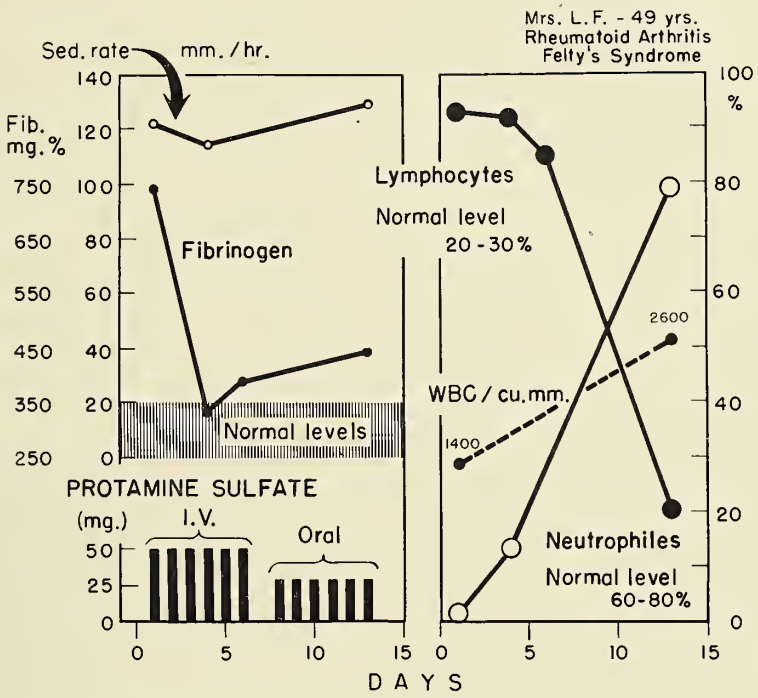


Fig. 7. The physiologic effect of protamine sulfate in Felty's syndrome. The level of plasma fibrinogen dropped markedly as the heparinoid toxin responsible for its elevation was neutralized. At the same time, the leukocyte count increased from 1,400 to 2,600—the neutrophils increasing from 6 to 79 per cent—while the lymphocytes dropped from 94 to 20 per cent. This case demonstrates that heparinoid toxin is the factor suppressing the bone marrow in Felty's syndrome and that protamine sulfate specifically neutralizes it.

Case 5.—Mrs. L. F., a forty-nine-year-old married woman, was admitted to Providence Hospital on April 10, 1954, complaining of chills, fever, sore throat, and painful, swollen and stiff joints.

Her present illness began in 1946 when swelling, pain, redness and limitation of movement developed in the right hand at the metacarpo-phalangeal joints. This was but the first of several episodes separated by periods of remission of several weeks each. During the following two years, other joints became similarly involved with progressive deformity and limitation of motion in the following order: both shoulder joints, both elbows, both wrists, left knee, both ankles. In 1948, her spleen was observed to be enlarged and a diagnosis of Felty's syndrome, later confirmed at University Hospital in 1951, was made. Since November, 1953, the patient had developed a persistently sore throat, inflammation of both eyes, and "walking pneumonia." During the year immediately preceding the present admission, the patient lost an estimated 20 pounds in weight.

Her history preceding onset of the present illness included an appendectomy in 1927, intestinal obstruction with lysis of adhesions in 1928, thyroidectomy in 1937, and exploratory laparotomy with cholecystectomy in 1951.

Examination revealed a pale, emaciated housewife weighing 74 pounds. Her blood presure was 136/80 and pulse rate 88 at rest. The sclerae were markedly injected peripherally, especially on the left. A slight amount of thick white material was expressed from the palpecral sac. The fundi were clear except for blurring of the left retina, an observation compatible with diffuse retinal edema. The mouth was partially edematous. The right anterior tonsillar piller was reddened and edematous with slight white purulent exudate adherent to the surface.

The chest exhibited fair expansion on inspiration. The lungs were dull to percussion with crepitant rales over the left upper lobe. An increased sinus rhythm was present and the heart tones seemed distant. There were no murmurs and the heart was not enlarged.

The abdomen bore a surgical scar in the right upper quadrant as a result of the 1951 cholecystectomy as well

as a number of reddened elevations, tender and hard to the touch, similar to previous elevations just before the "wire sutures" came out. The liver edge, which projected two finger-breaths below the right costal margin, was smooth and devoid of tenderness. The spleen extended five finger-breadths below the left costal margin, and was smooth, firm and slightly tender.

All four extremities revealed limitations of motion. Flexion deformities of all fingers made it impossible for the patient to clench her fist. The fingers appeared fusiform with swelling of the first interphalangeal joints. Severe hallux valgus was present in both feet. Diffuse muscle tenderness was present. A palpable, solitary, pea-sized node was noted on the extensor aspect of the right olecranon process.

Laboratory studies yielded the following information: hemoglobin 9.3 gm., erythrocytes 4,010,000, platelets 204,000, leukocytes 1,400, neutrophils 6, lymphocytes 93, eosinophils 1, sedimentation rate 122, plasma fibrinogen 726, calcium 11.6, phosphorus 4, total protein 7.2 (albumin 2.6 and globulin 4.6 for an A/G ratio of 0.57/1), prothrombin 15 seconds, clotting time (Lee-White) six minutes. The Kahn test was negative. Alkaline phosphatase measured 21, thymol turbidity 16, total cholesterol 195, cholesterol esters 71, bromosulphalein 2.5, total bilirubin 0.6, and bilirubin direct 0.2. Cephalin cholesterol flocculation was calculated at ++++ in twenty-four hours and again in forty-eight hours. A study of the bone marrow revealed "arrest of maturation" with neutropenia and relative lymphocytosis.

Roentgen examination showed both lung fields to be essentially clear. A large diverticulum was visualized, taking origin from the third portion of the duodenum and superimposed on the area of the bulb. There was no evidence of diverticulitis. The spleen was enlarged. The left kidney lay in a somewhat lower position than normal. Generalized demineralization of the bony structure was apparent. Using a normal subject as control on the same film, a comparative densometer AP study was made of the left wrists and hands. The density of the lower end of the patient's left radius compared closely to that of about 2.5 mm. of aluminum while that of the control was equal to about 5 mm. of aluminum. There was no roentgenographic evidence of bone atrophy.

The patient was given protamine sulfate in 50 mg. ampules intravenously for six days and then protamine orally in 20 mg. units daily for one week. The striking effect of this therapy on her plasma fibrinogen and other blood factors is shown in Figure 7. By the third day of treatment, the patient slept well without sedation for the first time. By the sixth day, the spleen had receded to the extent that it projected below the left costal margin not more than the breadth of two fingers. By the end of two weeks, improvement was general. More freedom of muscular movement was evident, reddened areas with exudate about the eyes had cleared and, in the patient's own words, "I can put my left arm over my head this morning for the first time in seven years!"

Comment.—This forty-nine-year-old woman presents the typical picture of Felty's syndrome[4] which Dawson,[3] Hench[8] and others have classified as a variety of rheumatoid arthritis characterized by a large spleen. Splenomegaly is associated with a typical depression of leukocytes, particularly a marked neutropenia, with a relative abundance of lymphocytes. This blood picture has led to the suspicion that the spleen manufactures some toxic substance which suppresses the bone marrow. Studies in this patient revealed a hyperplastic bone marrow with increased erythropoiesis and myelopoiesis but with an "arrest of maturation." Other investigators (Steinberg,[26] Price and Schoenfeld[22]) had previously noted marked erythropoiesis in this syndrome. Steinberg had further noted that hyperplastic bone marrow was typical of rheumatoid arthritis as well as of Felty's syndrome.

The plasma fibrinogen in this case was markedly elevated as is customary in all cases of active rheumatoid arthritis. According to our previous studies, fibrinogen compensates for the decreased functional capacity of the thromboplastin mechanism which in turn is caused by the action of heparinoid toxin. In this circumstance, it was further shown that protamine sulfate acted as a specific antidote for heparinoid toxin, neutralizing it and thereby allowing the plasma fibrinogen to descend to normal. It was therefore suspected that the heparinoid toxin might well be responsible not only for her elevated fibrinogen level but also for suppression of the bone marrow.

Treatment with protamine sulfate produced a dramatic rise in circulating neutrophils and total leukocytes with an equally dramatic drop in the level of plasma fibrinogen and lymphocytes (Fig. 7). There seems little doubt that the factor suppressing the bone marrow was the same heparinoid toxin which elevated the plasma fibrinogen level.

The enlarged spleen was considerably reduced in size during protamine sulfate administration, indicating that splenomegaly in this patient was probably a simple hyperplasia analagous to that seen in the bone marrow. This case demonstrates that heparinoid toxin blocks the maturation of cells in the bone marrow which, in response to the physiologic stimulus for more cells, undergoes hyperplasia. This same stimulus may affect all potential blood-forming tissues, including those of the spleen, which with sufficient prodding, may revert to its embryonic function of manufacturing blood. Once the heparinoid toxin is neutralized or removed, the bone marrow regains its normal capacity to supply mature cells to the circulation. As a result, the ex-

cessive stimulus for blood formation is relieved and the spleen, no longer driven by a state of emergency, returns to its normal, adult functions and recedes in size.

Summary

Evidence is presented supporting the concept that rheumatic affections are basically one disease which, in its incipiency, is an intrinsic inflammatory process of the connective tissues produced by disturbed enzyme balances. The etiology of early rheumatic disease is composed of three demonstrable factors which are (1) a deficiency in the production of physiologic hexose polysaccharide sulfate esters (heparin), (2) the production of closely related esters which are toxic rather than physiologic (heparinoid toxin), and (3) depletion of the thromboplastin mechanism by the heparinoid toxin.

Theoretically these factors in the etiologic triad originate in an intrinsic error in the metabolism and the biogenesis of the hexose polysaccharide sulfate esters somewhat analogous to the intrinsic error in the metabolism of purines and the biogenesis of uric acid in gout.

Laboratory and clinical studies are presented which illustrate all three factors in the pathogenesis of incipient rheumatic disease.

The plasma fibrinogen level is demonstrated to be a most valuable index of rheumatic disease activity by virtue of its close association with the activity of the thromboplastin mechanism.

Acknowledgment

Grateful acknowledgment is made to the Department of Medical Arts and of Medical Photography Wayne University School of Medicine for their assistance in preparing the graphs and illustrations for publication.

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Electrophoretic and Electrolyte Changes in the Blood

Studies of Surgical Patients on a Liquefied Natural Food High-Protein Oral Feeding Supportive Program

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THE LAST decade could easily be termed a milestone in the progress of surgery. During this period surgeons have awakened to the realization that the nutritional state of the patient can be a deciding factor in determining the success or failure of a major procedure. This new-found awareness has carried them forward to investigate the efficacy of new methods of preoperative and postoperative patient support.[3,4,6,7,8,11,12]

In reviewing the problem of adequate nutritive therapy for preparing the patient for surgery, as well as maintaining him for long periods after an operation, we became convinced that a liquefied natural food, high-protein oral diet[1] would be an effective method for his support.

An electrophoretic and electrolyte investigation was therefore undertaken to study the changes in the blood at regular time intervals of people receiving an oral feeding diet of natural, high protein-containing, liquefied foods. All of these patients were at Henry Ford Hospital under the care of the staff of the hospital.

Methods

Patients undergoing major abdominal operations constituted the main group selected to evaluate this oral feeding technique. This group was chosen as a test of the value of this procedure because these people are often not able to eat adequate meals for many days postoperatively.

With the aid of a colloid mill, it was possible to take high-protein foods such as eggs, milk and meats and blend them together with fruits and vegetables to form a non-viscous homogenous mixture that would flow under a positive pressure through a polyethylene nasal tube. One liter of this mixture corresponded to a large serving of meat, milk, eggs, fruit and vegetables to constitute calorically a large meal (about 1200 calories).[2] It was possible to begin tube feeding of this colloid mill natural food preparation within twenty-four hours after surgery.

To properly evaluate the effects of this treatment, electrophoretic analyses and electrolyte sodium and potassium determinations were run preoperatively and postoperatively.

About 25 ml of blood were drawn from each patient for these determinations. The blood was permitted to clot, and as the clot retracted, the clear serum was separated and centrifuged. For a few cases plasma samples were collected in order to ascertain the changes in fibrinogen in addition to the albumin, alpha-1, alpha-2, beta and gamma globulin concentrations. In these instances, an anti-clotting agent was added to the blood samples to prevent clotting. Electrolyte concentrations were not determined on these plasma samples.

After clarification of the sample by centrifugation, 5 ml were mixed with 10 ml of barbital buffer at pH 8.6 and ionic strength 0.1. This mixture was then placed in a "Visking" tubing sac and dialyzed against one liter of buffer for twenty-four hours at refrigerator temperature.

Electrophoretic studies were performed with the Aminco Stern electrophoresis apparatus in accordance with the technique previously reported.[10] Total protein values for the samples were determined by micro Kjeldahl analysis, and from these data the absolute values of the separate protein components were calculated.

Sodium and potassium determinations were made on all serum samples with the Janke flame photometer following the procedure developed by Fox.[5]

The cases in this study were divided into four separate groups:

1. Patients undergoing major surgery who received preoperative and postoperative tube-feeding support.

2. Patients undergoing major surgery who had preoperative blood studies performed and who were maintained postoperatively on tube feeding.

A preliminary report of the results thus far obtained on fourteen patients maintained by this method for from nine to seventy-nine days.

From the Medical Department, Chrysler Corporation, Detroit, Michigan.

TABLE I. SODIUM AND POTASSIUM VALUES
FOR SERUM SAMPLES OF PATIENTS IN FOUR SEPARATE GROUPS

Patient Group	Patient	Sample	Diagnosis and Fate	Surgical Procedure	Total Protein	Meq./L.	
						Na	K
1	H. B.	36 hrs. on T. F.	Stomach Deformity		6.61	124	7.8
		8 days on T. F.			6.79	125	4.5
		15 days on T. F.			6.81	136	4.5
		19 days on T. F.			6.56	141	6.5
		2 days Po-op.		Partial Gastrectomy	5.90	134	3.8
		4 days Po-op.			5.16	142	6.0
		9 days Po-op.			5.61	140	1.5
		16 days Po-op.			4.98	—	—
			Recovered				
1	M. S.	Pre-T. F. Spec.	Regional Enteritis		3.63	128	6.8
		1 week T. F.					
		Pre-op. Spec.			4.07	—	—
		24 hrs. Po-op.		Ileostomy	4.03	149	12.5
		9 days Po-op.			3.50	136	7.3
		15 days Po-op.			4.06	150	8.5
			Expired				
2	D. K.	2 hrs. Pre-op.	Ulcerative Colitis		7.95	133	7.3
		24 hrs. Po-op.		Ileostomy	7.73	124	—
		48 hrs. Po-op.			6.82	—	—
		5 days Po-op.			7.07	—	2.3
		9 days Po-op.			6.32	—	2.0
		17 days Po-op.			7.00	121	8.8
		26 days Po-op.			10.00	107	6.0
		28 days Po-op.			6.46	—	—
		34 days Po-op.			7.10	—	—
		43 days Po-op.			7.10	126	8.0
		49 days Po-op.			6.82	122	9.0
			Expired				
2	F. B.	2 hrs. Pre-op.	Ca of Stomach		7.04	134	—
		24 hrs. Po-op.		Total Gastrectomy, Splenectomy exc. Head Pancreas	5.72	—	—
		7 days Po-op.			5.78	132	3.5
		16 days Po-op.			6.91	132	5.0
		28 days Po-op.			6.46	140	3.5
		31 days Po-op.			6.17	139	4.8
		38 days Po-op.			6.28	129	4.0
		45 days Po-op.			6.25	129	4.5
		52 days Po-op.			5.20	128	4.5
		58 days Po-op.			5.81	127	5.3
		70 days Po-op.			7.65	130	—
		4½ months Po-op.			6.83	136	—
			Recovered				
3	M. M.	3 days Po-op.	Ca of Stomach	Total Gastrectomy	6.03	—	—
		10 days Po-op.			6.00	143	13.5
		21 days Po-op.			6.19	127	20.0
		27 days Po-op.			6.35	131	6.0
			Recovered				
3	D. C.	2 days Po-op.	Duodenal Ulcer	Partial Gastrectomy	5.43	146	3.8
		4 days Po-op.			6.15	146	4.0
		8 days Po-op.			7.40	152	4.5
		16 days Po-op.			4.66	133	4.5
			Recovered				
3	R. S.	Pre-T. F.	Duodenal Ulcer	Partial Gastrectomy	6.24	130	4.3
		1st day					
		4 days Po-op.			5.62	134	3.5
		8 days Po-op.			6.54	148	3.3
		11 days Po-op.			6.18	133	8.3
			Recovered				
4	L. S.	Pre-T. F.	Generalized Abdominal Carcinoma		6.31	130	5.0
		1 week T. F.			5.29	128	5.0
		2 weeks T. F.			5.21	123	5.0
		3 weeks T. F.			5.90	143	5.5
			Recovered				
4	E. L.	1 week T. F.	Ulcerative Colitis with Ileostomy		5.94	130	4.5
		2 weeks T. F.			6.03	139	4.8
		3 weeks T. F.			6.73	131	5.3
		4 weeks T. F.			6.64	132	4.8
		5 weeks T. F.			6.54	125	4.5
		6 weeks T. F.			5.78	127	5.0
		7 weeks T. F.			5.81	137	5.0
		8 weeks T. F.			6.40	—	—
			Recovered				

3. Patients undergoing major surgery who were maintained on tube feeding after the lapse of from one to eleven postoperative days.

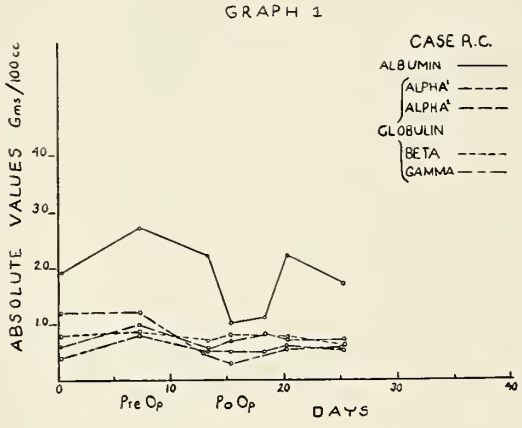
4. Inoperable patients who were maintained on tube feeding.

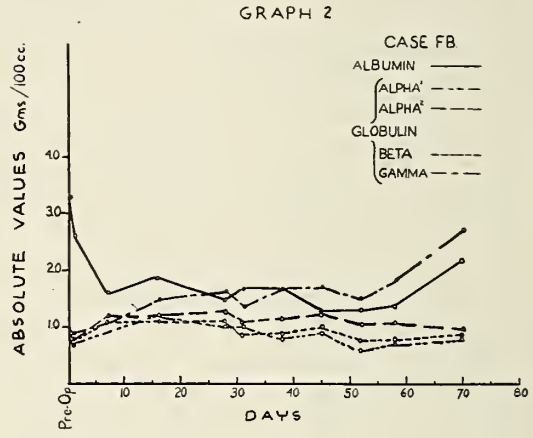
Blood samples were collected from these individuals at regular time intervals corresponding to their particular grouping.

Results

To present the electrophoretic results of this study for each of the four indicated experimental

categories, a typical case from each group has been selected. Graphs of the absolute electrophoretic values for these cases have been plotted against time for the five serum protein components—albumin, and alpha-1, alpha-2, beta and gamma globulins.





The electrolyte sodium and potassium results have been tabulated (Table I) for the four experimental groups.

Group 1 consisted of four patients who were preoperatively prepared for surgery by tube feeding, and who were postoperatively supported by this method. Three of these people had partial gastrectomies performed, and one an ileostomy.

The serum protein component graph of a typical case in this category (Graph 1, R. C.) illustrates the protein picture.

Before surgery, the albumin component is well maintained and shows a slight increase. The alpha-1, alpha-2, beta and gamma globulins are kept at relatively constant normal levels. Immediately after surgery, albumin takes a precipitous drop, levels off as tube feeding is continued, and finally increases.

Serum sodium values are slightly below normal preoperatively, but increase to normal values during the postoperative recovery period (Table I, Patient Group 1).

Potassium values for these patients are elevated and tend to further increase immediately after surgery (Table I, Patient Group 1).

Our second category includes those patients who were not tube fed prior to surgery, but who began tube feeding within twenty-four hours after the operation. On these cases, blood samples were obtained preoperatively, and then at regular intervals during the tube-feeding period. A partial gastrectomy, ileostomy, colon resection, and one patient undergoing a total gastrectomy, splenectomy and removal of the head of the pancreas were the cases studied in this group.

The graph (Graph 2) of the absolute values of the serum components against time for F.B. is illustrative of the patients in this classification.

A sharp albumin decrease immediately after surgery is apparent. Pronounced also is the increase in gamma globulin concentration with the rise of acute infection. From the thirty-seventh to the seventieth postoperative days the gamma globulin concentration is greater than the albumin concentration. After this time, the infection began to clear, and with the clearing of the infection the albumin concentration began to approach its normal level and the gamma globulin concentration decreased. The alpha-1, alpha-2, and beta globulin concentrations remained fairly steady over the time period studied.

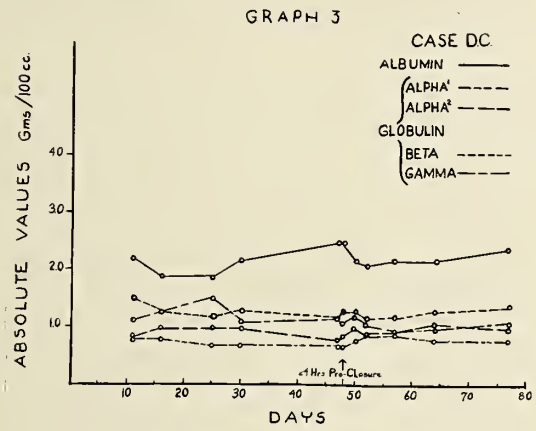
The sodium concentrations were well controlled in this group with the exception of the sharp decline in D.K., on the twenty-sixth postoperative day (Table I, Patient Group 2).

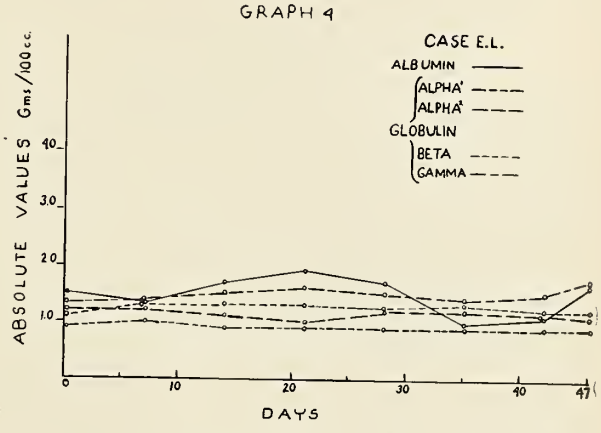
For F.B., the potassium values remained within normal limits for the entire postoperative period. D.K. showed a great fluctuation in potassium concentration indicating an increase with time (Table I Patient Group 2).

Our third category is composed of four patients who were placed on tube feeding at varying times postoperatively. The surgery undergone by these patients include a total gastrectomy, two partial gastrectomies, and a colostomy.

The graph of the absolute protein component

values against time for D.C. (Graph 3), a seventy-six-year-old woman, is typical for the people in this group. From this graph, we can see that the albumin concentration is well maintained and





even tends to increase. All of the globulin components are well controlled and remain close to their normal values.

For the cases in our third patient classification, sodium values remained at normal levels (Table I, Patient Group 3). Potassium values showed a trend toward increase and in one case, M.M., increased alarmingly between the tenth and twenty-first postoperative days. On the twenty-seventh postoperative day, this value decreased and approached a more normal level.

Our fourth patient group is composed of two inoperable patients who were placed on tube feeding. One patient, L.S., was suffering from a generalized abdominal carcinoma, and the other, E. L., from an ulcerative colitis with an ileostomy.

Graph 4 shows the absolute electrophoretic results plotted against time for E.L. The albumin concentration shows a sharp decrease on the thirty-fifth day of tube feeding after having shown an increase. After the thirty-fifth day, the albumin value shows a strong increase. All the globulin component concentrations remained at constant levels over the time studied. Sodium and potassium values are close to the normal ranges for these electrolytes (Table I, Patient Group 4).

Discussion

A program of systematic electrophoretic investigation, as has been outlined in this study, has been found to be a good way to determine the effects of a natural, high-protein, liquefied food, tube-fed diet on the human system. Whipple[9] has demonstrated that a state of equilibrium, indeed a dynamic equilibrium, exists between the serum proteins and the proteins of the tissues. The absolute electrophoretic serum component values then represent the state of the protein equilibrium at a given time. By the use of a series of electrophoretic measurements, we are therefore able to follow the patients' protein balance between serum and tissue.

Our results have indicated that a natural food, high-protein, liquefied diet will support a patient preoperatively and maintain him postoperatively. Albumin is maintained at a steady rate preoperatively, drops during the time immediately after surgery, and then increases as the traumatic effects of surgery pass.

In cases where infection developed postoperatively, or where it was present preoperatively, the gamma globulin value served as an index of the extent of the infection. For, under these circumstances, the absolute value of this component was markedly elevated.

The electrolyte sodium and potassium determinations were included in this study to ascertain the effects of this natural food diet, and the effects of the patients' condition on their value. In uncomplicated cases, these values remained close to normal. In more complicated cases, sodium showed a tendency to decrease and potassium a tendency to increase.

Werner[13] has suggested that the sharp reduction in caloric intake which generally accompanies operation and injury may be the entire explanation for the post-traumatic period of protein catabolism. It may be that the early feeding of

natural food, high-protein, diets balanced with adequate amounts of fats and carbohydrates, using electrophoretic and electrolyte determinations to accurately chart the course of the patient's progress may be in part a solution to the problem of post-traumatic catabolism.

Summary

Results of a preliminary electrophoretic investigation of the absolute component protein values of patients undergoing major surgery, who have been supported by a liquefied natural food, high-protein, oral feeding supportive program, indicate that this is a valuable procedure for the maintenance of these patients.

The best results obtained with this method have been on patients who have been preoperatively and postoperatively supported by this tube-feeding procedure. However, patients who begin this treatment postoperatively respond favorably to it.

The absolute value of the electrophoretic gamma globulin component remains constant and close to normal levels in cases in which infection does not develop. In those instances where infection does develop, the increase of this component serves as an index of the infection.

Initial determinations of sodium and potassium concentrations in uncomplicated surgical cases treated with this tube feeding technique show little variance from their normal values.

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A COMPULSORY HEALTH INSURANCE PLAN IN SWEDEN

A compulsory health insurance plan has been enacted in Sweden. It will be jointly financed by the insured persons, employers, and the government.

Insured persons will pay 44% of the cost; employers, 29%; and the state, 27%. The state's portion will be passed on to tax bills and thus absorbed by the higher-income earning groups. The total cost of the first year's operation of the insurance plan is estimated at $144 million.

State health insurance premiums must be paid by every person above the age of 16 who has a taxable income of at least $233 a year. This would automatically blanket in virtually all of the population with the exception of those receiving national old-age and disability pensions. Persons earning over $3,000 a year can carry an additional amount of insurance if they so desire, and will be entitled to larger sick benefits. On an annual income of $1,750, the health insurance premium is $25.22 yearly.

Among other broad benefits, the plan provides maternity protection for working women. Expectant mothers will receive 65 to 70 per cent of their normal earnings during the compulsory maternity leave. All mothers will receive a bonus of $52.38 for childbirth, in addition to free public-ward confinement in hospitals, or free obstetrical care at home.

Physicians' fees will be reimbursed 75 per cent up to a set ceiling.

The Problem of Making an Artificial Lung

By Nicholas S. Gimbel, M.D.

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THE ORGANS which medicine has reproduced have been the mechanical ones—artificial arms, legs, and joints; lenses for the eye; hearing aids; artificial kidneys, hearts, and lungs. Reproduction of chemical organs—muscles and glands—is still far away. I shall talk about the artificial lung, largely from the standpoint of methods that have been employed in attempting to reproduce the high surface area coupled with relatively low blood volume that obtains in the mammalian lung.

The ideal substitute for the pulmonary capillaries would probably be a plastic network of comparable delicacy and fineness. Because no such technological achievement has currently come forth, it has been necessary to work with blood films that are in naked contact with oxygen.

An obvious method of creating a thin layer of blood without the benefit of enclosing walls to help control the thickness is to allow the blood to flow by gravity down a vertical surface. For a number of reasons, an unsatisfactory film tends to result. (1) Because blood is viscous, the film is many times thicker than a capillary, even at low flow; (2) As blood flow increases, so does the film thickness. A familiar analogy is to the Mississippi River at floodtime—although the velocity increases somewhat, most of the step-up in flow is represented by a rising of the river. (3) As blood flows slowly down a surface, it tends to do so in rivulets with intervening dry spaces, rather than as a completely wetting film. Tremendous loss of film surface thereby results. One method of combatting this phenomenon is to completely wet the surface with saline solution and thereafter keep it wet with blood at all times. Alternatively, one may employ the inner aspect of a vertical spinning cylinder as the filming surface. The centrifugal force imparted to the blood tends to overcome the surface tension which contracts the film.

Another method of filming blood that depends upon gravity flow is to deliver it into the upper end of a slightly tilted horizontal revolving cylinder (Fig. 1). Blood films the entire inner

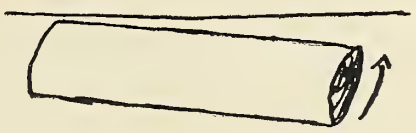


Fig. 1.



Fig. 2.



Fig. 3.

surface as friction and inertia carry the blood up while gravity pulls it down. The tilt harnesses gravity in an additional vector to transport the blood from one end of the cylinder to the other. There is little difference between this oxygenator and the Archimedes' screw oxygenator employed by Jongbloed (Fig. 2). It is predictable that these oxygenators have thicker films than those in which the force of gravity is not diluted by the inclined-plane effect of the inside of a cylinder. A similiar "waste" of gravity occurs in the baffles of the various tower packings used in the chemical industry for gas exchange.

A different technique of filming blood employs a trough in which surfaces are continually being dipped, a procedure which at once permits them to pick up a fresh blood film to expose to the atmosphere above the trough and at the same time returns a similiar amount of blood which has already been exposed. The apparatus devised by Bjork consists of a shaft bearing many rotating metal discs that dip into the blood below (Fig. 3). Unfortunately the trough must hold a large blood volume, because if the discs are placed too closely together, foaming and bridging occur.

When attention is turned to techniques by

Abridgement of an address delivered at a staff meeting of the Detroit Receiving Hospital on Oct. 17, 1953.

which thinner films may be obtained, many appealing plans have to be abandoned because they are too harsh for the erythrocytes. Thus, they cannot, like Quaker Oats, be shot from cannons

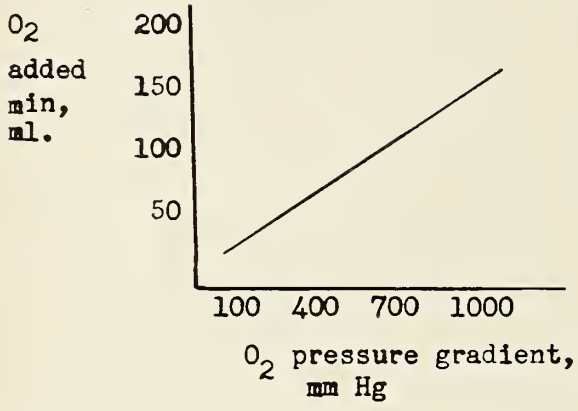


Fig. 4.

as a fine spray, nor may they be exposed on a drum similiar to a Padgett-Hood dermatone, using a knife edge to cut a film of a single cell's thickness. However, graduated centrifugal force may be employed to accelerate the blood with greater energy than gravity offers. As the blood accelerates, the film becomes thinner. There are practical limitations upon the amount of acceleration that may be employed, because the blood must be collected from the moving surface following the filming.

A radically different approach to oxygenating blood is to release oxygen bubbles directly into the blood. Even if the pulmonary capillaries cannot as yet be reproduced, at least the pulmonary alveoli or air sacs can be. Interesting problems and properties are associated with bubbles of various sizes. For any given total volume of gas, the smaller the radius of the bubbles, the larger the total surface area. As with all diffusion situations, gas transfer is a direct function of surface area. On the other hand, the buoyancy of larger bubbles is greater than that of small bubbles, and therefore large bubbles are more readily handled than small ones if separation of blood and bubbles by buoyancy is contemplated. Large bubbles are also considerably easier to burst or fuse.

Large and small bubbles lend themselves to development in quite different modes. If minute bubbles are formed in the blood by forcing oxygen through pores of 4 microns diameter moistened with a wetting agent, the enormous surface area will be comparable to that of pulmonary alveoli. Efficiency will be high, and an oxygenating chamber of low blood volume will be possible; but the task of removing unabsorbed oxygen bubbles to escape gas embolism is formidable. The problem may be solved in two ways. The oxygen added may be exactly metered to the subject's requirements, so that there will be no residual gas to cause embolism. The other solution is to compromise somewhat with bubble size. If slightly larger bubbles are employed, passage of the blood over a baffle coated with a silicone antifoam compound will bring about coalesence of the small bubbles to large ones. These will be buoyant enough to rise to the surface of the blood and burst, providing bubble-free blood for return to the subject.

Larger bubbles (diameter over 1 mm) are buoyant enough to be employed in a counter-flow system. That is, in a vertical column containing blood and bubbles, the blood may be added at the top and the bubbles near the bottom. Blood may be continuously withdrawn from the bottom of the column bubble-free because the rate of the climb of the bubbles established by their high buoyancy exceeds the velocity of the blood as it is withdrawn from the column. This dynamic system in part compensates for the lower total surface area of the bubbles because the blood in contact with the bubbles is exchanged at a far more rapid rate.

After this survey of techniques that have been employed to reproduce the lungs, it is appropriate to return to a consideration of the fundamental factors which control the rate of gas exchange, and how these may be manipulated to help us. The amount of oxygen introduced into the blood in natural or unnatural lungs over a set time interval is indicated by the formula, O_2 introduced $= K \times \text{Area} \times (P_G - P_L)$. The factor of surface area is obvious. Two lungs will introduce twice as much oxygen as one lung. The size of a mechanical lung must be adjusted to the anticipated oxygen requirements and to its power. The reserves in human pulmonary surface area are familiar; with but two-thirds of one lung remaining, a person may be comfortable at rest. $P_G - P_L$ expresses the gradient in oxygen pressure between the gas and the blood. That the effect of the gas pressure gradient is a linear one

is shown by the following experiment. The Bjork dipping disc oxygenator was run with oxygen pressure gradients of 100, 400, 700, and 1000 mm Hg; Figure 4 shows that the oxygen added

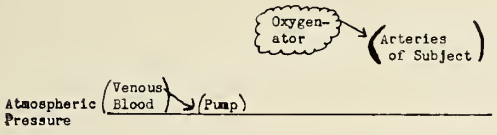


Fig. 5.

is proportional. It is therefore reasonable for artificial lungs to employ as high an oxygen pressure as possible. Most use 95 or 100 per cent oxygen at barometric pressure, but they could be smaller if operated at higher pressure. K is an inclusive factor which integrates the effects of membrane and blood film thickness, turbulence in gas and blood, flow rates of gas and blood, temperature, hemoglobin concentration, and pH.

Of these factors determining K, only turbulence —of especial importance—will be discussed. When a liquid flows in a laminar, non-turbulent fashion, changes in relative position between the molecules are minimal, and all move at the same rate in the same direction. With turbulent flow, there are eddies and currents within the stream. The blood at the surface rapidly exchange with that beneath it, and there are similiar exchanges in process at deeper sub-surface levels. The type of diffusion which occurs into liquid which is still or in laminar flow (called *molecular diffusion*) is slower than that which occurs into agitated or turbulently flowing liquid (*eddy diffusion*). In molecular diffusion, the kinetic energy of the gas molecules is the sole distributing force, and the gradient across the gas-fluid interface or membrane is limited by the build-up of gas pressure in the fluid bordering on the interface or membrane. Eddy diffusion, on the other hand, supplements molecular diffusion by constantly churning the fluid. Gas pressure gradients within the fluid are minimal, while the gradient between the gas and the liquid is maximal. The contrast is the same as between the cooling rates of soup which stands and soup which is stirred.

The two mechanical lungs of greatest current prominence, those of Drs. Gibbon and Dennis, lean heavily upon turbulence for their performances. In Gibbon's oxygenator, blood flows by gravity down both sides of vertical wire mesh, the irregularity of the wire surface imparting turbulence to the blood. Dennis' lung, both

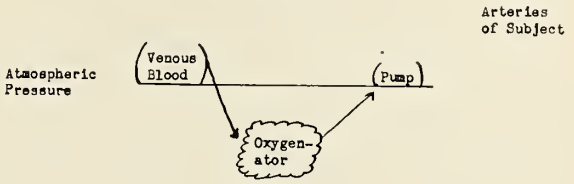


Fig. 6.

more complex and more powerful, employs centrifugal force to film blood on wire cloth spinning discs.

In planning what arrangement of pumps to use in conjunction with the mechanical lung, it is interesting to speculate why we mammals have right and left hearts instead of a single heart with the pulmonary bed located either before or after the systemic one. If the pulmonary bed had to deliver systemic arterial pressure, the delicate capillary structure as we know it would be impossible, and the hydrostatic pressure would flood the alveoli with edema fluid. On the other hand, the blood in the superior and inferior vena cava is at atmospheric pressure and could not perfuse even the low-resistance pulmonary bed. However, with mechanical lungs there is greater latitude, and a one-hearted circuit is possible. It is true that most circuits are patterned after the human one, with pumps before and after the lung, but each of the other two possibilities offers special advantages. A single pump may be located before the oxgenerator, which is maintained at a pressure sufficiently above atmospheric to perfuse the systemic circulation (Fig. 5). Although the circuit is difficult to control, it offers the great advantage of increase in oxygen pressure. With greater power, the machine may be smaller. The second possibility is to place a single pump beyond the oxygenator, which is maintained at a sufficient pressure below atmospheric to draw the blood directly from the great veins (Fig. 6). Although losing oxygen pressure, this circuit is simple to operate and does dispense with one pump.

There are many problems associated with artificial lungs that we have insufficient time to dis-

(Continued on Page 1352)

A Page from Medical History

II. The Garden of Eden

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OUR ACTUAL knowledge of the practice of medicine in ancient Babylonia ("The Cradle of Civilization") is very scanty; it rests upon a few passages in the Code of Hammurapi, a few remarks by Herodotus (the first historian) and what we can deduce from the now extensive understanding of the culture of the peoples of that day. Inasmuch as medicine is only one facet of human endeavor, perhaps we can grasp some idea of what the practice of medicine consisted of in Babylonia if we become acquainted with the general aspects of that, the first civilization, of which we are the recipients.

The traditional site of the Garden of Eden is in Mesopotamia, a few miles northwest of Baghdad, the land between the Tigris and Euphrates rivers. It is in this land where Ur of the Chaldees, Lagash, Nippur, Babylon and Nineveh are located.[3]

"And the Lord God planted a garden eastward in Eden; and there he put the man whom he had formed." (Gen. 2:8).

"And a river went out of Eden to water the garden; and from thence it was parted, and became into four heads." (Gen. 2:10).

"The name of the first is Pison; that is it which compasseth the whole land of Havilah, where there is gold." (Gen. 2:10).

"And the name of the second river is Gihon; the same is it that compasseth the whole land of Ethiopia." (Gen. 2:13).

"And the name of the third river is Hiddekel; that is it which goeth toward the east of Assyria. And the fourth river is Euphrates." (Gen. 2:14).

We do not know from whither man cometh or to whither he goeth but we do know from extensive archaeological investigations that he has been present on the earth for thousands of years. Before writing was invented, we know prehistoric man by his work, i.e., building, tools and manufacture. The very interesting habit of early peoples of building one city over the ruins of the preceding one has made it possible for us to obtain the story in a consecutive way.

Thus, one of many such mounds, called Tepe Gawra (The Great Mound)[3] was discovered in 1927, fifteen miles northeast of modern Mosul (ancient Nineveh) in Iraq. Systematic excavations revealed that Tepe Gawra contained twenty-six individual occupation levels, but only the upper six of these levels belong to the historic age.

We do not know exactly when man began to leave his nomadic life and began to live in settled communities. "But the absolute beginnings of settled occupation, which marks man's divorce from nomadic existence, are believed to have been found only in 1948, with the discovery of this primitive site in Iraqui Kurdistan".[3] The settlement is dated between 5000 and 6000 B.C.

As far back as we know, white men lived in Europe and around the Mediterranean, black people lived in Africa and yellow men were living in Asia. Inasmuch as our civilization was begun in Babylonia, Egypt and the neighboring countries, passed to and was further developed in Greece, Rome and Europe, we are mainly concerned with these sources and not so much with the cultures of the black and yellow races.

There is some difference of opinion as to which is the older culture; Babylonia or Egypt. It is probable that they arose, along with other less well-known cultures, at about the same time, although many students of this problem believe that civilization first arose in The Plain of Shinar, now known as Mesopotamia, the land between the Tigris and Euphrates rivers. Writing and the use of metal during the third millennium B.C. ushered in the historic age in Mesopotamia. Southern Mesopotamia was known as Sumer (Biblical Shinar: Genesis 10:10). To the north of Sumer were the Akkadians; later on they were to be distinguished in the south by the Babylonians, in the northwest by the Assyrians, and in the west by the Amorites.

The history of life around the Tigris and Euphrates rivers has been divided into three parts: (1) the story of Babylonia (1900-1750 B.C.); (2) the story of Assyria (750-612 B.C.); and (3) the story of the Chaldeans (612-538 B.C.).[1]

How is it that we know so much about these people? The excavation of the cities, layer by layer, has revealed temples, dwellings, stables, tools, pottery, ornaments, and weapons. Fortu-

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nately for us they developed their writing on clay tablets, so many of these have been preserved.

From the ruins of the library of Assurbanipal, the last great Assyrian Emperor and the grandson of Sennacherib, 22,000 clay tablets have been recovered and are now in The British Museum. These tablets contain the religious, scientific and literary works of past ages. The excavations of The Royal Cemetery at Ur by the British and Pennsylvania Museums have revealed much of the culture of the early Sumerians. These latter "digs" have revealed that the Sumerians practiced mass burials. Apparently, when a man of distinction died, all of his servants and slaves, male and female, draft oxen yoked to their wagons, household implements, treasures and weapons were buried with him. Due to the gold, silver and precious stones buried in this way, grave robbers have pilfered most of these graves, just as they have in Egypt. The discovery of The Code of Hammurapi in 1901 by M. de Morgan has given us the earliest known code of laws.[2]



Fig. 1. Mesopotamia, "the land between the rivers," "the cradle of civilization," arose 7000 years ago. The history of civilization between the two rivers (Tigris and Euphrates) has been described in three chapters:

1. Early Babylonia 2900 to 1750 B.C.
2. The Assyrian Empire 750 to 612 B.C.
3. The Chaldean Empire 612 to 538 B.C.

The life of these early people centered around their temples. A large temple of the Sumerians is known as a Ziggurat. The excavation of the Ziggurat of Ur was first begun in 1854.[9]

The Sumerian writing is called cuneiform (Latin cuneus, meaning "wedge"). Sir Henry Rawlinson deciphered the cuneiform from the Triumphal Monument of Darius the Great.[1]

High Sumerian civilization is first found in Ur of the Chaldees. Abraham of biblical fame lived in this city.

"And Terah took Abram his son, and Lot the son of Haran, his son's son, and Sarai his daughter-in-law, his son Abram's wife; and they went forth with them from Ur of the Chaldees, to go into the land of Canaan." (Gen. 11:31).



Fig. 2. Triumphal Monument of Darius the Great, the Rosetta Stone of Asia, on the Cliff of Behistun. Darius the Great (521-485 B.C.), Persian King, had this great monument twenty-five feet high and fifty feet wide carved in the rock cliff 300 feet above a main road at Behistun. This is the most important historical document surviving in Asia. Below and to the right of the relief shown here are recorded the triumphs of Darius in three languages: (1) Persian; (2) Babylonian cuneiform; (3) Elamite. Sir Henry Rawlinson, knowing the Persian cuneiform, was able to decipher the Babylonian cuneiform, whereupon the thousands of clay tablets recovered from the city-mounds of Babylonia began to tell us the history of that people.
(Photograph obtained from the British Museum).

A few of the names of the ruling kings of the Plain of Shinar may be mentioned: Sargon of Akkad (c. 2500 B.C.); Naran-Sin, of Akkad, grandson of Sargon; Hammurapi of Babylon (1948-1905 B.C.); Sargon II of Assyria (722-705 B.C.); Assurbanipal of Assyria, the grandson of Sennacherib; Nebechadnezzar of Bablyon (604-561 B.C.).

It has been shown that the Hebrew patriarchs incorporated parts of "The Code of Hammurapi" and parts of the epic Stories of the Babylonians into their teachings (The Old Testament).

The Sumerian legend of Paradise, "The Flood and the Fall of Man" is of an epical nature and probably represents more nearly than any production yet discovered the national epic of the religious and cultured Sumerian people. The synopsis of this epic is: "The theme which inspired this epic is the Fall of Man, and it will be generally admitted that this theme suggests the most profound ideas and inspires the deepest emotions of man. Enki, the water god, and his consort Ninella, or Damkina, ruled over mankind in Paradise, which the epic places in Dilmun. In that land, there was no infirmity, no sin and man grew not old. No beasts of prey disturbed the flocks, and storms raged not.

In a long address to her consort, Ninella glorifies the land of Dilmun, praising its peace and bliss.

But for some reason, which is all too briefly defined, Enki, the god of wisdom, became dissatisfied with man and decided to overwhelm him with his waters. This plan he revealed to Nintud, the earth mother goddess, who with the help of Enlil, the earth god, had created man. Nintud, under the title of Ninharsag, assisted in the destruction of humanity. For nine months, the flood endured and man dissolved in the waters like tallow and fat. But Nintud had planned to save the King and certain pious ones. These she summoned to the river's bank where they embarked in a boat. After the flood, Nintud is represented in conversation with the hero who had escaped. He is here called Togtug and dignified by the title of a god. He becomes a gardener, for whom Nintud intercedes with Enki and explains to this god how Togtug escaped his plan of universal destruction. Enki became reconciled with the gardener, called him to his temple and revealed to him secrets. After a break, we find Togtug instructed in regard to plans and trees whose fruit the gods permitted him to eat. But it seems that Nintud had forbidden him to eat of the Cassia. Of this he took and ate, whereupon Ninharsag afflicted him with bodily weakness. Life, that is, good health, in the Babylonian idiom, he should no longer see. He loses the longevity of the prediluvian age."[5]

"The Code of Hammurapi" (1948-1905 B.C.), the oldest known code of laws, gives us invaluable knowledge of the Babylonians. The code, in cuneiform, is divided into three parts:

(1) The Prologue; (2) The Code itself; (3) The Epilogue. Illustrative portions from each part will be quoted.[2]

"When Anu (the father of Ishtar, worshipped very early at Uruk), the majestic, King of the Anunnaki (the evil spirits, visible in the black clouds of the heavens), and Bel (a god, worshipped at Nippur and elsewhere), the Lord of Heaven and Earth who established the fate of the land, had given to Marduk (the God of Babylon;

it is the Medorach, often found in compound names in the Bible), the ruling son of Ea (God of the waters), dominion over mankind, magnified him among the Igigi (the kind spirits, personified by the white clouds of the heavens), and called Babylon by his great name; when they made it great upon the earth by founding therein an eternal kingdom, whose foundations are as firmly grounded as are those of heaven and earth—it was then that Anu and Bel called me, Hammurapi, the exalted prince, a God-fearing man, by name, to cause justice to be practiced in the land, to destroy the wicked and the evil, to prevent the strong from oppressing the weak, so that I might go forth like Shamash (the Sun God, who had famous temples at Larsa and Sippar) to rule over the black-haired people, to give light to the land, and like Anu and Bel, promote the welfare of mankind."

(The prologue continues listing the deeds, accomplishments and subject peoples of Hammurapi.)

Representative parts of the Code are quoted in full below. After the quotation from "The Code of Hammurapi," references to similar passages in the "Old Testament" are given; the former being one thousand years older than the latter.



Fig. 3. Air view of the Ziggurat (temple tower) at Ur. Excavation of the Ziggurat of Ur was first begun in 1854. Most of the excavation was performed by the joint expedition of The British Museum and of The University Museum, Philadelphia, to Mesopotamia. The lives of these people centered around their temples. "If civilization is largely a way of fixing man's place in nature and society, how did the ancient Mesopotamians make these all-important adjustments? Very briefly, nature was to the thoughtful inhabitant of the Tigris-Euphrates valley a combination of capricious and violent forces, each personified by one or more gods.

The gods' actions were unpredictable; hence life on earth was ever restless and uncertain. Man must be everlastingly at pains to please and appease the gods so as to influence his own fate for the better." (p. 16 Everyday Life in Ancient Times). (Photograph obtained through the courtesy of the University Museum, Philadelphia).

"1. If a man make a false accusation against a man, putting a ban upon him, and cannot prove it, then the accuser shall be put to death." (See Ex. 22:18).

"3. If a man threaten the witnesses, or do not establish that which he has testified, if that case be a case involving life, that man shall be put to death." (See Deut. 19:16-19).

"7. If a man buy silver, gold, slave, male or female, ox, sheep, ass, or anything whatsoever from the son or slave of any person, without witness or contract, or receive the same on deposit, he is regarded as a thief, and shall be put to death."

"9. If a man who has lost any article find it in the hands of another and the man with whom the lost article is found say, 'a merchant sold it to me in the presence of witnesses,' and the owner of the article say, 'I can produce witnesses who know my lost property,' then shall the buyer bring the merchant who sold it to him,

and the witness before whom it was purchased, and the owner shall bring witnesses who know the lost property. The judge shall examine their evidence before God, and both of the witnesses before whom the price was paid, and of the witnesses who identified the lost article. If the merchant is then proven to be a thief, he shall be put to death. The owner of the lost article receives his property, the buyer shall recover the money he paid for the same from the estate of the seller."

"16. If a man conceal in his house a male or female slave, a fugitive from the palace, or from a freeman, and do not produce the same at the order of the officer, the master of that house shall be put to death."

"22. If a man carried on highway robbery and be captured, he shall be put to death."

"41. If anyone fence in the field, garden, or house of an officer, sub-officer, or tributary, and furnish the fencing material therefor, when the officer, sub-officer, or tributary return to the field, garden, and house, the fencing material becomes his property.'

"42. If a man rent a field for tilling and raise no crops; then he shall be called to account for not having cultivated the field, and he shall deliver grain to the owner of the field, in proportion to the yield of the adjacent fields."

"45. If a man let his field to another for a fixed rent and has received the rent for the field, but storms come and destroy the crops, the loss falls upon the renter." (Davies's comment: "This law is eminently unjust, and proves clearly that the rich man had advantage over the poor, and yet the same custom prevails today in our own land.")

"53. If anyone neglect to keep his dyke in proper condition and do not strengthen his dyke, and if a break take place, and the meadowland be inundated by the water, the man in whose dyke the break has taken place, shall pay back for the grain which was thereby destroyed."

"102. If a merchant have given money for investment to an agent, and the latter suffer loss in the place whither he went, he shall return the principal in full to the merchant."

"117. If a man incur a debt and sell his wife, son, or daughter for money, or bind them out to forced labor, three years shall they work in the house of their taskmaster; in the fourth year they shall be set free." (See Deut. 15:12, also Ex. 21:2).

"129. If a man's wife be caught lying with another man, both shall be bound and thrown into the water, unless the husband of that woman desires to pardon his wife, or the King his servant." (See Lev. 20:10, also Deut. 22:22).

"133. If a man be taken captive in war, and there is sustenance in his house, and his wife have left his house and court and have entered the house of another, because that woman has not guarded her body, but entered another's house, she shall be condemned according to law and thrown into the waters."

"141. If a man's wife, living in his house, has made her mind to leave that house, and through extravagance run into debt, have wasted her house, and neglected her husband, one may proceed judicially against her; if her husband consents to her divorce, then he may let her go her way. He shall not give her anything for her divorce. If her husband do not consent to her divorce and take another wife, the former wife shall remain in the house as a servant."

"142. If a wife quarrel with her husband, and say, thou shalt not possess me; then the reasons for her prejudices must be examined. If she be without blame, and there be no fault on her part, but her husband have been tramping around, belittling her very much, then this woman shall be blameless, she shall take her dowry and return to the house of her father."

"146. If a man take a wife and she give her husband a maid-servant for a wife, and this one bear him children, and then this maid-servant have tried to make herself equal with her mistress, because she has borne children, her mistress may not sell her for money, but may make her a servant, and count her as one of her servants." (See Gen. 16:1 ff, 30:1 ff).

"179. If a votary or sacred prostitute (one connected with a temple), to whom her father has given a dowry and a deed for the same, and has stated in the deed that she may bequeath her estate to whomsoever she please, and have granted her full powers to dispose of it; after her father dies, she may bequeath her estate to whomsover she please. Her brothers have no claim thereto."

"188. If an artisan adopt a child and teach him his trade, no one can demand him back."

"193. If the son of a Ner-se-ga, or a sacred prostitute, long for his father's house, and run away from his

(Illustrations on opposite page)

Fig. 4. A clay tablet in cuneiform relating the history of the early Sumerian and Semitic kings. A compilation made by a scribe in the 22nd Century B.C.

(Photograph obtained through the courtesy of the University Museum, Philadelphia).

Fig. 5. Alabaster statuette recovered from Khafaje, North of Baghdad. This is a statuette of a typical Sumerian, shaven and shorn, with hands clasped and wearing the flounced skirt. Eyes inlaid.

(Photograph obtained through the courtesy of the University Museum, Philadelphia).

Fig. 6. The gold head of a bull with lapislazuli beard from the sound-box of the lyre from the Royal Cemetery of Ur. Eighteen hundred and fifty graves were unearthed. The objects recovered were divided among the museums of Baghdad, London and Philadelphia. These discoveries revealed: (1) the extraordinary wealth and artistic quality of this epoch; (2) its antiquity showing the early civilization in Mesopotamia.

Fig. 7. The Code of Hammurapi (1948-1905 B.C.)

This is a slab of stone (black diorite) nearly 8 feet high. "Hammurapi is represented as standing before Shamash, the sun-god of Sippar, the ancient seat of the Hammurapi dynasty. The god is seated upon his throne, and is in the very act of delivering this code to the King, who humbly and reverently stands before him."[2] The writing is in cuneiform. The code is divided into three parts: (1) The Prologue. (2) The Code. (3) The Epilogue. The discovery of the Code of Hammurapi is one of the greatest achievements of archeology. It is now in the Louvre Museum in Paris, France.

(Photograph of the Code of Hammurapi obtained fromthe Louvre Museum, Paris, France.)

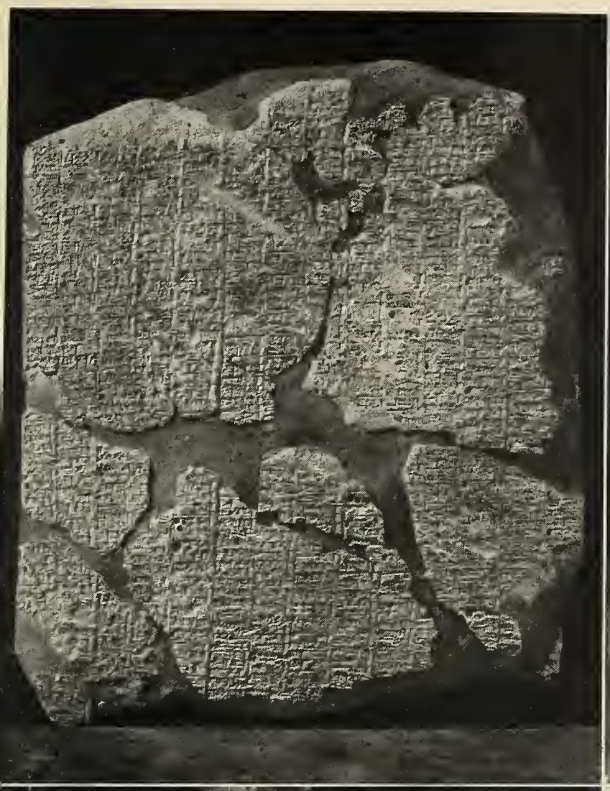


Fig. 4.



Fig. 5.



Fig. 6.



Fig. 7.

(See description on opposite page)

foster-father and foster-mother and go back to his father's house, one shall pluck out his eye."

"196. If a man destroy the eye of another man, one shall destroy his eye." (See Ex. 21:24-25, Lev. 24:20 and Deut. 19:21).

"200. If a man knock out the teeth of a man who is his equal in rank, one shall knock out his teeth."

"206. If one man strike another in a quarrel and wound him, he shall swear, 'I did not strike him intentionally,' and he shall pay the physician." (See Ex. 21:18 f).

"215. If a physician treat a man for a severe wound with a bronze knife and heal the man, or if he open an abscess (near the eye) with a bronze knife, and save the eye, he shall receive ten shekels of silver."

"216. If he (the patient) be a freedman, he shall receive five shekels."

"217. If it be a man's slave, his owner shall pay the physician two shekels of silver."

"218. If a physician treat a man for a severe wound with a bronze knife and kill him, or if he open an abscess (near the eye) and destroy the eye, one shall cut off his hands." (See Deut. 25:11 f).

"219. If a physician treat the slave of a freedman for a severe wound with a bronze knife, and kill him, he must replace the slave with another."

"220. If he open an abscess (near the eye) with a bronze knife, and destroy the eye, he shall pay one-half what the slave was worth."

"221. If a physician heal the broken limb of a man, or cure his diseased bowels, the patient shall pay five shekels of silver."

"222. If he be a freedman, he shall pay three shekels of silver."

"223. If he be a slave, his owner shall pay the physician two shekels of silver."

"224. If a cow-doctor or an ass-dootor treat a cow or an ass for a severe wound, and cure the animals, the owner shall pay the doctor one-sixth of a shekel of silver as fee."

"225. If he treat a cow or ass for a severe wound, and kill it, he shall pay the owner one-fourth its value."

"229. If a builder builds a house for anyone and does not build it solid; and the house, which he has built, falls down and kills the owner; one shall put that builder to death."

"230. If it kills a son of the owner of the house, one shall put to death the son of the builder."

"235. If a boat-builder builds a boat for a man, and does not make it tight; if in that same year the boat be sent on a trip and be damaged, the boat-builder shall rebuild that boat, and make it strong at his own expense, he shall give the reconstructed boat to the owner."

"242. If a man hire (an ox) for one year, he shall pay the owner four gur of grain for a working ox."

"250. If an ox, while passing through the streets (market) gore and kill a man, this case is not subject to litigation." (See Ex. 21:28).

"257. If a man hire a field-laborer, he shall pay eight gur of grain per year."

"274. If a man hire an artisan—

(b.) the hire of a bricklayer, five SE of silver.

(c.) the hire of a tailor, five SE of silver.

(g.) the hire of a carpenter, four SE of silver."

(There are 180 SE in a shekel; thus five SE would be 1/35 of a shekel; a shekel—65 cents).

"282. If a slave say to his master, 'Thou art not my master, if his master shall prove him to be his slave, he may cut off his ear."

The Epilogue:

"The just laws, which Hammurapi, the wise King, established. He taught the land a just law and a pious statute. Hammurapi, the protecting King, am I. I have not withdrawn myself. . . .

"The great gods called me, and I am the salvation-bringing shepherd (ruler), whose scepter is straight (righteous), and whose good protection extends over my city. In my breast I cherish the habitants of Sumer and Akkad: . . . That the strong might not injure the weak, and that the widow and the orphan might be safe. I have in Babylon . . . in order to administer justice in the land, to decide disputes, to heal injuries, my precious words written upon my monument, before my image as King of righteousness have I set up."

Hammurapi implores the various gods to wreak all kinds of disaster on his successors unless they follow his code and preserve his monument.

Herodotus, the first historian, who lived in the fifth century B.C., has this to say after his visit to Babylonia:

"They have also this other custom, second to the former in wisdom. They bring out their sick to the market place, for they have no physicians; then those who pass by the sick person confer with him about the disease, to discover whether they have themselves been afflicted with the same disease as the sick person, or have seen others so afflicted; thus the passersby confer with him and advise him to have recourse to the same treatment as that by which they escaped a similar disease, or as they have known cure others. And they are not allowed to pass by a sick person in silence, without inquiring into the nature of his distemper. . . . They embalm the dead in honey, and their funeral lamentations are like those of the Egyptians. . . ."[4]

While the Sumerians were among the first peoples on the earth to write, to live in cities, to erect large temples, to develop a written literature, to develop the wheel and the true arch, and while they engaged in farming and stock raising and engaged in business and trade, developed money and interest, keeping extensive records of all this in their cuneiform language written on clay tablets,

(Continued on Page 1440)

Hydrocortisone with Neomycin Ointment in Dermatologic Therapy

A Clinical Study

By M. B. Sofen, M.D.
Kalamazoo, Michigan

THE VALUE of hydrocortisone ointment in a number of dermatological conditions has been proven by several investigators and by much clinical use.[1,2] The present study was undertaken to ascertain the value of hydrocortisone with neomycin, a proven widely used broad spectrum antibiotic.

This study consists of 250 cases selected from private practice. In some cases the ointment was used alone, and in others it was used in conjunction with other forms of therapy. The efficacy of the medication in the latter group was judged by comparing the clinical response obtained from that which was expected from other conventional forms of therapy. The drugs were dispensed in 1 per cent and 2 ½ per cent hydrocortisone acetate mixed with 5 mgm of neomycin per gram. The base was a petralatum base.*

The following conditions were treated in substantial numbers: infantile eczema, eroseo, infectious eczematoid dermatitis, pruritus ani, contact dermatitis, and acute dermatitis venenata. The medicine was applied sparingly to the involved areas three to four times daily. Results were tabulated as "good" when the improvement was striking or more rapid than was to be expected from the usual types of therapy. Results were described as "fair" when improvement was not better than was to be expected from conventional treatment. "Poor" results were recorded when there was no improvement, or when improvement was slower than expected with conventional treatment. The chart below tabulates the clinical impressions obtained from the 250 cases of this study.

On the whole, the results of therapy with neomycin-hydrocortisone mixture were comparable to the results obtained from other studies using hydrocortisone alone. However, in such cases where a secondary bacterial infection was a prominent part of the dermatitis, the addition of neomycin to the ointment greatly increased the efficacy of the medication. In such cases both clinical and symptomatic improvement appeared to occur quicker than previous experience would indicate with neomycin used alone, affirming the anti-inflammatory action of hydrocortisone. Several observations are noteworthy from this study:

TABLE I.

Diagnosis	Total	Good	Fair	Poor
Infantile eczema	19	14	3	2
Atopic eczema in adults	6	4	2	0
Infectious eczematoid dermatitis including nummular eczema*	44	26	19	7
Monilia infection (hand and feet)	23	13	6	4
Pruritis ani	11	7	3	1
Acute dermatitis venenata† (weeds-topical medicines-etc.)	41	28	6	7
Disseminated neurodermatitis	24	7	8	9
Seborrheic dermatitis	12	6	2	4
Folliculitis of face	6	0	1	5
Tinea pedis with 'ids'	12	6	4	2
Contact dermatitis**	40	30	7	3
Echthyma (chronic and acute)	3	3	0	0

*This group contained cases of stasic eczema and varicose ulcers—clinical and symptomatic improvement was noted only while the medication was being used.
†The two cases apparently aggravated by the medication were both in this group.
**All cases avoided further exposure to the guilty contactent if it could be determined.

1. In the two cases of mild exacerbation of dermatitis, following the use of the combination, neither was due to the neomycin. There was no instance where the action of the neomycin seemed to be detrimental to the therapy.

2. The combination, including the antibiotic, in no instance in this series caused a monilia infection as might be expected from its use. This is true also in the pruritus ani cases where the danger of monilia is perhaps greater. On the contrary, the mixture was used in several cases of acute monilia infection on both hands and feet, and appeared to be of definite value.

3. The clinical results from the combination of neomycin and hydrocortisone were certainly comparable to the results expected from the use of hydrocortisone alone. In no way did the addition of neomycin impair the value of the latter drug.

4. It is a known fact that secondary infection and inflammatory reaction is of common occurrence in so many dermatoses which are not primarily of infectious origin. This fact would certainly be an inducement for the use of a safe antibiotic in the hydrocortisone ointment if the mixture were chemically and pharmacologically compatible. In this relatively small study this was found to be the case.

5. There is no question that the 2½ per cent strength gave better clinical results than the 1 per cent, as is true with the plain hydrocortisone ointment. This fact was especially obvious in the acute or severe stages of the cases treated, and not so noticeable in the subacute and chronic stages. For reasons of economy, some cases were treated with the neomycin-hydrocortisone

*Supplied as Neocortef by the Upjohn Company.

ointment mixed with the equal parts of Lassar's plain paste or with a water-miscible base. These mixtures proved to be compatible and well tolerated.

In each of the following conditions, one to four cases were treated with the ointment for one or two weeks. There was no improvement in any case that could be attributed to the medicine:

Boils	Lichen planus
Erythroplasia	Neurotic excoriations
Leukoplakia	Psoriasis
Pustular bacterids on the hands†	

There are several drawbacks to the wide use of this medication, which were obvious in this series:

1. The cost of the ointment is rather high—enough so that it would be prohibitive to the average patient if the lesion was widespread, as is unfortunately so often the case.

2. The relief of the itching in such cases as acute dermatitis venenata is not noticeable to the patient as quickly as with some anesthetic agent in common usage. For this reason its use in such cases may be discouraging to the patient. The average patient is apparently as interested in quick relief of the itching as in a more rapid cure of the dermatoses.

3. The fact that the medication used in this study was in an ointment base made it difficult to spread on some wet lesions. This drawback will be eliminated when a cream or lotion base is available.

4. Many of the cases, other than those that were self limited, had reoccurrences of the lesions and symptoms when the ointment was discontinued. In many cases this was as bad as the original dermatitis. In this series all recurrences were helped promptly by the further use of the medication.

†Dramatic improvement in one case so diagnosed could not be confirmed in other such cases, and makes the author doubt his original diagnosis.

Summary

Two hundred and fifty cases selected from private practice were treated with hydrocortisone-neomycin ointment and results obtained were comparable to those obtained with hydrocortisone alone, and in such cases where a secondary infection was present, results were far superior to the results expected from hydrocortisone alone. Several observations and drawbacks were noticed from this study and discussed briefly. It would seem that the use of the neomycin-hydrocortisone combination is certainly as valuable as hydrocortisone alone and of much greater value in certain selected dermatoses.

It is true that it is sometimes difficult to honestly judge the efficacy of a drug in many dermatoses, more especially in acute and inflamed conditions. So often a remarkable improvement is noted from the simplest of therapy or no therapy at all. In such a clinical study, without benefit of placebo comparisons, one may easily become overenthusiastic. In this study, the author recognizes that some of the impressive improvement may have been due to other factors (i.e., removal of known contactents in the contact dermatitis cases), but the value of this medication was appraised as objectively as possible and leaves no doubt as to the value of this combination of medicaments in a number of common dermatoses.

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THE PROBLEM OF MAKING AN ARTIFICIAL LUNG

(Continued from Page 1343)

cuss—control of clotting, carbon dioxide elimination, temperature control, denaturation of proteins, effects upon the formed elements of blood. We have considered only some of the physical aspects of imitating pulmonary function and the major techniques that have been applied to the problem up to the present time. Within the past five years the artificial lung has emerged from infancy into promising adolescence.

Acknowledgment

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St. Luke's Hospital Clinico-Pathologic Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan

Clinical Record

The patient was a white male, 60 years old, who was well until approximately 3 years before entering the hospital. At that time, he developed urinary obstruction and this was relieved by prostatectomy performed elsewhere. Thereafter the patient was well except for frequency and nocturia of three to four times.

Approximately one year before the final admission, the patient entered the hospital for repair of a left inguinal hernia. This was performed and recovery was uneventful. The blood pressure was 158/90 mm. Hg. X-ray of the abdomen revealed renal outline shadows that were stated to be larger than expected. Intravenous pyelography disclosed elongation of the superior-inferior diameter of the renal pelvis on the right. There appeared to be some smooth distortion of upper portion of the right pelvis that also involved the middle and inferior infundibuli. The minor calyces revealed no dilatation. A similar distortion of the renal pelvis was apparent on the left. The ureters and lower urinary tract were not remarkable.

The patient then continued in his usual state of health, with nocturia and frequency, for most of the ensuing year. During the last two months of that period there were occasional episodes of slight hematuria. On the day before admission, the patient experienced extreme urgency with inability to urinate. This lasted for 24 hours and was accompanied by severe aching pain in the region of the urinary bladder. During this 24-hour period, a few drops of blood were passed. The patient was then admitted to St. Luke's Hospital.

Physical examination revealed a well-developed and well-nourished white male who was in acute distress. The temperature was 98.4 degrees, pulse 70, respirations 20, and blood pressure 170/110 mm. Hg. The head and neck were not remarkable. The chest was clear to auscultation and percussion. The heart was slightly enlarged to the left, the pulse was regular, and no murmurs were heard. The abdomen was soft and the liver was palpated 4 cm. below the right costal margin. The spleen was not felt. Palpation revealed to one observer slight enlargement of both kidneys, although this was not confirmed by others. There was moderate tenderness on the left and slight tenderness on the right. The urinary bladder was dilated and extended to the umbilicus. The prostate was enlarged, soft, and tender. The extremities were symmetrical and there was no edema.

Catheterization released approximately 600 cc. of bloody urine from the bladder. After this, the urine was pale yellow, slightly cloudy, alkaline, and of specific gravity 1.010. There were two plus proteinuria and no reducing substances or ketone bodies. The centrifuged sediment revealed large numbers of erythrocytes. Hematologic examination revealed 11.1 grams of hemoglobin per 100 cc. There were 3,700,000 erythrocytes and 12,000 leukocytes per cu. mm. Differential count of 100 cells revealed 67 segmented granulocytes, 25 lymphocytes, 4 band cells, 2 eosinophils, 1 basophil, and 1 monocyte. The non-protein nitrogen was 29 mg. per 100 cc. The serologic test for syphilis was negative.

On the third hospital day, cystoscope revealed trabeculation of the bladder and ureteral orifices of normal appearance. Retrograde pyelography was performed and the x-rays revealed appearances similar to those of the previous examination. There was, in addition, a suspected smooth encroachment along the upper portion of the left renal pelvis and it was thought that this was due to a cyst. The ureters were not remarkable. On the sixth hospital day, transurethral resection was performed and histologic examination of the specimen revealed glandular hyperplasia of the prostate. Recovery was uneventful and the patient was discharged on the twelfth hospital day.

Two months later, the patient re-entered the hospital with complaints of weakness, mental confusion, and pain in the region of the left kidney. The findings on physical examination had not changed. The blood pressure was 180/100 mm. Hg. The urine was yellow and cloudy, and the test for occult blood was positive. There were 8 gm. of hemoglobin per 100 cc., and 2,900,000 erythrocytes and 9,000 leukocytes per cu. mm. Differential count revealed a slight increase in segmented granulocytes and band cells. The non-protein nitrogen was 41 mg. per 100 cc. The patient became semicomatose, râles were heard over both lungs, the temperature rose to 105 degrees, and the patient died after six days in the hospital.

Discussion

Dr. A. K. Cameron: This patient underwent prostatic resection 3 years before the last admission and since that time was well except for urgency and frequency. Slight retention is not uncommon after prostatic operations but these complaints may also indicate a disturbance of the urinary tract above the bladder. Two years later the patient entered the hospital for herniorrhaphy. At this time, there was slight elevation of blood pressure and the abdominal and retrograde x-ray studies revealed changes strongly suggestive of bilateral polycystic renal disease. These changes include enlargement of both kidneys with lengthening of both renal pelves and smooth distortions of the pelvic margins. The ureters of normal size indicate that obstruction in the lower urinary tract was not pronounced. About 10 months later, hematuria was first noted. This bleeding may have been from the region of the prostatic resection or from the trigone. We know that 10 to 15 per cent of patients in the 2 to 4-year period after transurethral prostatic resection develop hematuria or some degree of urinary obstruction. The hematuria may come from varicositics of the trigone, sloughing of residual prostatic tissue, hemorrhagic cysts of the prostatic mucosa, or fibrosis at the resection site causing interference with opening and closing of the urinary bladder. However, the site of this lower urinary tract bleeding is not difficult to identify, and I am tempted to assume that the hematuria originated in the kidneys. In polycystic disease the kidneys may or may not be palpable. In this case, there is a suggestion of enlargement of both kidneys as seen on the abdominal

x-ray, and one observer states that the kidneys were palpable and slightly enlarged. Now the clinical picture of polycystic renal disease becomes quite complete, and includes bilateral renal enlargement with lengthening and distortion of the pelvic shadows accompanied by hypertension and hematuria. In addition, the repeatedly low specific gravity of the urine indicates that compression of renal parenchyma by the cysts was extensive. However,

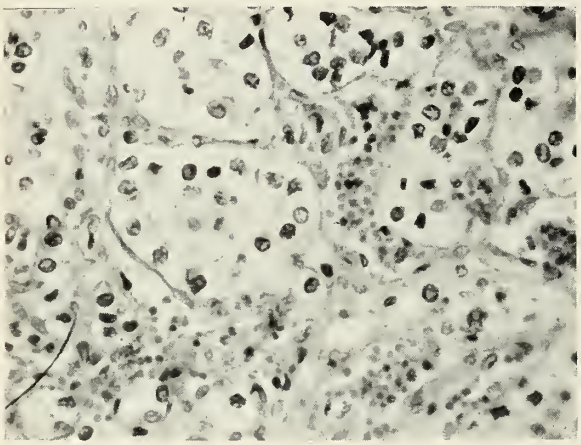


Fig. 1. Microsection of carcinoma of renal parenchyma showing tubular arrangement of tumor cells.

it must be emphasized that these measurements of specific gravity were not taken daily, and were not taken on 24-hour samples, so that the impression of advanced and diffuse renal disease based on this factor may be inaccurate.

Now even though the diagnosis of bilateral polycystic renal disease appears to be pretty well established, there are several features of the subsequent clinical course that cause me to hestitate. The patient is 60 years old and is beyond the age at which polycystic kidneys ordinarily prove fatal. The blood pressure is only slightly elevated and this degree of hypertension is not uncommon for a male at the age of 60 years. In addition, a higher pressure might be expected if we assume that the renal disease is diffuse and so extensive as to reduce the concentrating function of the tubules and to cause death two months later. Hematuria was present only during the last four months of life and this is often caused by other lesions such as tumor. The most irregular feature is that the patient now becomes rapidly and progressively worse and dies without developing uremia. This is not the usual course for polycystic disease of the kidneys, and suggests widespread metastatic tumor. In view of this atypical course, I believe the record should be evaluated for evidence of malignant tumor.

Returning to the x-rays, we find an encroachment at the upper pole of the left kidney that obliterates the entire pelvic shadow in that region. Polycystic disease does not ordinarily obliterate any large segment of the renal pelvis. However, compression of a large portion of the renal pelvis is common in carcinoma of the kidney. During the one-year interval between the last two retrograde studies, enlargement of the lesion at the upper pole of the left kidney is apparent. Pronounced enlargement of a single cyst in polycystic disease is uncommon. I need hardly mention that hematuria is almost constantly associated with carcinoma of the kidney at some stage. Thus several features are most suggestive of malignant tumor of the left kidney. In summary, the presence of hypertension, hematuria, and renal enlargement associated with elongation and distortion of both renal pelves appears to establish the diagnosis of polycystic renal disease. However the rapidly progressive course suggestive of metastatic disease, the absence of uremia in the terminal illness, and the excretory urograms showing an enlarging lesion of the left kidney with obliteration of the upper pelvic space indicate the presence of malignant tumor at that site. I shall then make the two diagnoses of bilateral polycystic renal disease and carcinoma of the left kidney with widespread metastases.

Dr. J. C. Smith: I suppose we have all been cautioned at some time against making two diagnoses for one clinical condition. The diagnosis of polycystic disease rests largely on the interpretation of the radiographic changes of the renal pelves. Dr. Caumartin, do you believe that these x-rays establish the diagnosis of polycystic disease?

Dr. H. T. Caumartin: Not at all, although my impression prior to this atypical and rapid course was that this patient had polycystic kidneys. The retrograde studies are strongly suggestive of this lesion. However, I must say that some anatomic variation of the right renal pelvis may account for this unusual appearance.

Diagnoses of Dr. Cameron

Bilateral polycystic renal disease
Carcinoma of left kidney with widespread metastases

Anatomic Diagnoses

Carcinoma of left kidney
Metastatic carcinoma of myocardium, lungs, pleura, liver, ileum, right kidney, para-aortic lymph nodes, and right and left adrenals

Dr. J. C. Smith: The left kidney weighed 560 gm. and revealed a carcinoma of the parenchyma that extended into the renal pelvis. The right kidney weighed 220 gm. and was not remarkable except for several metastases within the cortex that measured up to 1.5 cm. in diameter. Distortion of the right renal pelvis was not apparent at autopsy. Microscopic examination revealed, in different portions, solid, tubular, and papillary arrangement of the tumor cells. The tubular portions were lined by large clear cells. (Fig. 1)

Grawitz described renal carcinoma in 1883 and believed the tumor to arise in ectopic adrenal rests within the cortex of the kidney. According to Willis[2] this was disproved by Stoerk in 1908, and by others subsequently. Willis states that the tumor shows no predilection for the upper or lower pole of the kidney and may arise in small adenomas in any portion of the cortex. Extension into the renal vein is frequent and malignant cells are often disseminated as tumor emboli. The most frequent presenting complaints are hematuria and lumbar pain. The first sign may be metastatic tumor and this is occasionally in bone or cerebrum. Ackerman and Regato[1] cite the cases of Bell who found metastasis in sixty-six of eighty-four cases in which the renal tumor exceeded 5 cm. in diameter. In an additional sixty-five cases in which the primary tumor measured less than 5 cm., there were only five cases with metastases. Common sites of metastases in order of decreasing frequency include lungs, liver, cerebrum, and bone. The mean duration of carcinoma of the kidney in the series of Albarran, as cited by Ackerman and Regato, was 4.5 years.

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The Ounce of Prevention

It should be unnecessary to urge doctors to encourage periodic health examinations. This is not a new idea and has been practiced by some of us with great satisfaction to patients and doctors alike. The present proportion of doctors to the population in Michigan, does not disclose any sound reason for neglect of this important field of medical practice.

Has specialization gone to such extremes that there are no longer enough doctors who can do a good routine physical examination? If that is the sad conclusion to be reached, then our profession may expect more, and not less, critical appraisal of the doctors.

Surely we do not wish to let the public feel they are getting an adequate physical appraisal when they are "screened" in a program sponsored by the Health Department. There is no substitute for thoroughness.

The value of the periodic health examination is sound. It is the foundation of medical practice from which prevention and treatment stem and on which the most enduring patient-physician relationships are built.

Let us not forget the pillars of good medical practice:
A careful subjective history.
A complete physical examination.
The use of special laboratory procedures, when indicated.
A summary of the salient points for your record.

Finally—
Tell your patient what your findings indicate.
Give pertinent advice.
Have patient report any new symptoms.

By this ounce of prevention—your patient reaps pounds of health protection. By a careful health examination the doctor is rewarded in his practice by untold good will and satisfaction.

Robert H. Baker

President, Michigan State Medical Society

President's



Message

Editorial

HOSPITAL STAFF APPOINTMENTS

For several years we have heard many complaints from general practitioners and other members of the society, about the impossibility of securing suitable staff appointments in the hospitals. That complaint was one of the reasons given for the formation of the American Academy of General Practice. Such a criticism has seemed unnecessary. The Ingham County Medical Society Bulletin for October contains a message from the president, H. E. Cope, M.D., which is worth reading. We are reproducing it:

"Do you know of any other large community in which the practice of medicine is conducted under conditions as nearly ideal as in Ingham County?

In how many areas in this country can a young doctor obtain staff appointment and hospital privileges in the first year of his practice?

Why is there no rivalry between the staffs of the individual hospitals in Lansing?

The present conditions for medical practice in this area did not just happen. They are the result of long term thought and planning and concerted action on the part of the membership of the Ingham County Medical Society over the years. They represent the expenditure of considerable time and energy on the part of a large number of men. If you, as an individual practitioner of medicine, want these conditions to be maintained and improved, you can do so only by maintaining an active personal interest in the affairs of the Society. We believe interest in and loyalty to the Society can be largely measured by attendance at the business meetings.

Is an hour a month too high a price for you to pay for the privilege of practice in this community?"

This is a very stimulating and worthwhile message, testifying to the feasibility of staff appointments in Lansing hospitals. We believe other counties could make a similar report. We know the condition in Calhoun County. Every new doctor who settles in the county is immediately invited to the County Society meetings and asked to join. As soon as that preliminary is accomplished he is eligible to apply for staff privileges in any or all of our hospitals. Applications for membership in either the society or the hospital staffs must be read at one meeting, referred to the credentials committee who make a report the next month, and the member can be voted in. Every practicing doctor of medicine in the county is a member. We have a joint credentials committee for the hospitals in Battle Creek and the committee report is accepted by each staff. Younger and unknown men are told whether they have minor or major privileges, and periodically these are reviewed until full acceptance.

The Councilor in Calumet reports that young physicians and new members have no trouble being appointed to the hospital staffs and becoming full privileged members. They need however some method of close supervision until the younger doctor has proven his qualifications.

If other counties have liberal and available staff appointments, why not write and tell us?

U. S. POSTAGE

Every year the Post Office department reports a deficit, and usually asks for increases in rates. Just recently there was a proposal to increase rates for second class mail. Magazines like our JOURNAL would have to pay more. We are willing, but we think there might be some economies practiced in the use of U. S. postage. The Editor lives on a rural mail route, and frequently receives advertising sheets printed like a newspaper, and probably going for a very few cents a pound. The address is printed: "Patron Rural Route, Patron Post Office Boxholder, Patron Lettercarrier Route." We believe that covers almost everyone. These sheets are mass printed and dropped into the mail. The Post Office must sort and deliver each one separately, which costs about as much as first class mail. We have had many of these recently, some advertising political candidates, some advertising chiropractic, some advertising various of the questionable health insurance companies criticized by the Federal Trade Commission.

We have also just seen light manila "House of Representatives" envelopes sealed and bearing the "frank" of two different Congressmen from other states. Inside one was a laudatory speech supposed to have been given in the House several years ago about some Michigan man who is now a candidate for reelection in another district. The address was "Rural, Star-Route or Post Office

Box Holder-Local Michigan". Also on the cover was printed "part of Congressional Record—Free." On the sheet inside at the top were the words "Not Printed at Government Expense."

Maybe someone paid for the actual running of the sheet through the press. The envelopes were government standard, the work of folding, inserting, and mailing, and the postoffice handling were certainly not insignificant. This particular item was for a candidate of one congressional district, but the whole state was probably covered, else why did the editor get one in another district.

We believe economies in the use of the mails would probably obviate much of the deficit which is accumulating.

BOOKS FOR BEAUMONT SHRINE

Since completing the Beaumont Shrine at Mackinac Island, the Michigan State Medical Society, especially its hardworking committees, has foreseen and brought the project to established fact and has been concerned with properly furnishing the monument.

Period furniture has been assembled, equipment for a trading station of the period, and surgical and medical supplies, which would be standard for that time, have been sought. Medical and surgical books of the 1820-30 period are rare and are mostly museum pieces. Studies in research, library surveys, and rare book houses have finally located a considerable number of authentic old masters.

The generosity and enthusiasm of our newly elected President-Elect, William S. Jones, M.D. and his wife, have secured for our shrine a most adequate and practically priceless gift of books to the Michigan State Medical Society.

We can think of no more worthy gift, and heartily thank our esteemed President-to-be. This gift was announced at the meeting of the Executive Committee of The Council, November 17, 1954.

SOCIAL SECURITY

The President has promised to recommend again that the medical and allied professions be taken into OASI. We have talked about this problem many times; we cannot see that it is insurance. We do not believe it is economically sound as now operated. We are told there is a huge surplus of about twenty billions of dollars put aside to pay the claims which have been or are being accumulated. Granted. So what? The money has been used for general expenses of the government and has always gone into the general fund after being collected by the internal revenue department. To be sure "bonds" have been deposited but when money is needed to pay larger claims, how do we cash these bonds? Issue a new loan or levy a new tax? There is no other way.

So much for the fundamental scheme. It has been accepted for about twenty years and has become part and parcel of our daily lives and future hopes. The scheme is accepted and cannot now be withdrawn. We recognize the picture, and can only offer our suggestions for betterment. The problem will meet us almost immediately—what is to be our reaction to the new bill? The new social security program is vastly different from what we did object to. We now object to the compulsory inclusion. There are groups which have been given a choice. Why not the medical profession?

We have had letters from our members, and conversations to the effect that we have always simply opposed this measure, have not outlined its benefits and have refused our members a chance to express their own reaction.

We have never completely opposed the program, but we do resent certain features: compulsion, forfeiture of benefits if one over sixty-five (under the new bill) earns one hundred dollars a month. The bill specifies $1,200 a year, but has a regulation that no one can be denied his benefits for any month in which he has earned less than $80, no matter how much he may have made during the year. We believe that after 65 one should be able to collect his "benefits" without hindrance or forfeiture.

We believe the requirements for medical certification of inability to work are covered by other methods. If a person is disabled he cannot draw until he is 65. A plan to determine the amount then due has been proposed, which should be of benefit. Four years may be omitted in the averaging of the last ten years, unless the insured has accumulated forty quarters before becoming disabled.

We firmly believe, however, that a disabled person should be able to draw his OASI benefits as long as he is totally disabled prior to age sixty-five.

There are many benefits in the OASI plan

which are distinctly desirable. If a man dies, his wife will draw stated benefits—also his children. A widow and two children under nineteen years of age may get as high as $200 per month. Analysis of the new bill and its provisions are now available, and should be studied by our members. Until this last bill was passed we were unable to find out very much.

PERIODIC HEALTH APPRAISAL

The advocacy of periodic health appraisals has been one of the objectives of the medical profession for many years. The editor remembers helping his father do them almost a half century ago. It is not new but is having a new application. There are planned programs on the topic for the coming months, worked out by a Committee of the Society. Such assays of busy men and women, many times lead to discoveries and treatment meaning the saving of life and health. This is a function of the active practice of medicine. It consists of many services leading to the discovery of hidden, neglected, or even suspected conditions of great importance.

There are many kinds of service doctors of medicine render, active practice of medicine being one of the most important. Public health service is indispensable. It is entirely different from the active practice of medicine, and has been so classified from the early days of our medical societies. The Michigan State Medical Society was responsible for the establishment of the first public health service in Michigan. We have read the minutes of some of the county medical societies for the last third of last century, when every doctor and every meeting was partly taken up with discussion and reports of the general state of health of the communities. Since the Public Health Service has become established it has been strongly believed by the profession that each practitioner should keep to his own adequate and self-satisfying part.

Surveys and studies leading to diagnosis are recognized as the practice of medicine. Surveys are apt to be very misleading in that the patient thinks he has had a complete examination and diagnosis and only needs treatment to be carried out. Actually he has been studied very incompletely, and in certain specified fields only.

The periodic health surveys which we are ad-

(Continued on Page 1360)

JOHN R. RODGER, M.D.



John R. Rodger, M.D., Bellaire, newly elected alternate delegate to the American Medical Association, was born in Elmira, Michigan. He graduated from High School in Minot, N. D., and received his B.S. degree from Jamestown College, N. D., in 1926.

After spending three years as YMCA Secretary in Minneapolis and St. Paul, Minn., he attended the University of Michigan Medical School, receiving his degree in 1933. He interned at Mountainside Hospital, Monclair, N. J., and since that time has been in general practice in Bellaire, Michigan.

He is past-president of the Northern Michigan Medical Society, since 1946 has been a delegate to the Michigan State Medical Society, and is on the Michigan Advisory Hospital Council. He is chairman of the Periodic Health Appraisal Committee, chairman of the Committee for Prevention of Traffic Accidents, is a member of the Committee on Rural Medical Service, Committee on courses in Medical Economics, and the Health Commissioner's Advisory Committee on Rules and Standards for Hospitals. He is chairman of the Rural Health Conference for 1954 and 55, and is on the Board of Trustees of the Michigan Health Council. Dr. Rodger is a lecturer for the University of Michigan Medical School on the topics, "Practicing in Smaller Communities" and "The Family Physician as Counsellor," and has been the author of a number of articles published in the Journal of the Student, and THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

He has been president of the School Board in Bellaire for six years, is a member of the Antrim County Board of Education, member of Lions Club, is on the Advisory Committee of the Northwest Michigan Child Guidance Clinic in Traverse City, member of the Board of Trustees of the Michigan's Aid Society and is on the Camp Committee for the State Y.M.C.A. Camps. He is a member of the Bellaire Methodist Church.

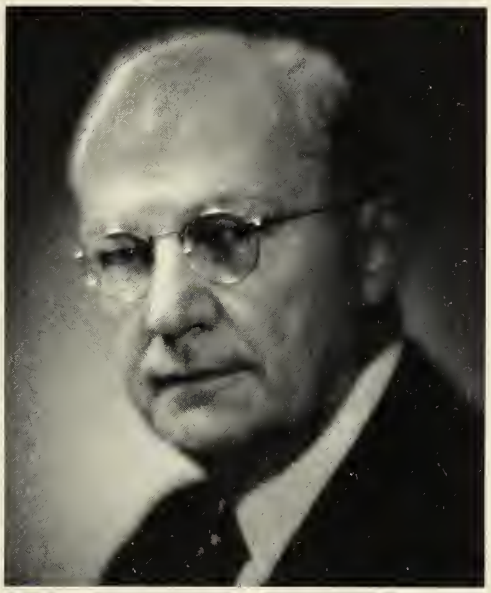
In 1935 he married Katherine Johnston and they have three children, Mary Jean, Eleanor Jo, and James.

Cyrus Cressey Sturgis, M.D.

Half Man, Half Myth

"If you want to be heard," Cyrus C. Sturgis, M.D., has said many times, "then be brief."

That's pretty sound advice, but when applied to the art of biography it can be treacherous. It would be extremely difficult, if not impossible, to be brief about Dr. Sturgis. In fact, it is doubtful that anyone in the State of Michigan who is even superficially acquainted with this man could come anywhere near characterizing his gleaming personality.



Frankly, the writer dislikes the responsibility of writing about Dr. Sturgis, because all one can do, in an oblique sort of way, is to communicate some isolated fragments of this man's life, a life which has become almost a living Michigan Medical Myth.

Don't misunderstand my use of the word "myth." There is nothing derogatory intended. Myths are important in our lives, just as symbols are. And perhaps no where than in the medical profession itself is myth more important.

Dr. Sturgis bridges the realities of medicine with the ideals of his profession. He, better than anyone the author knows at the University of Michigan Medical Center, connects these two spheres for the medical students. No doubt that is why he is considered one of the best teachers of clinical medicine Michigan ever had. No doubt that is why teaching medicine is still Dr. Sturgis' abiding love.

It is as a teacher that Dr. Sturgis must be fully appreciated. Some will no doubt dispute this claim, saying that he is much better, much more creative, and certainly more productive as the patient's doctor. Few have matched Dr. Sturgis' sense of quiet drama at the bedside. Few can even imitiate his genuine concern for the patient's welfare.

Let the man speak for himself: "Don't forget the art of medicine," he told me. "Medical art is the skill of winning the patient's confidence."

Then he added: "There is one thing which every doctor can do for the aged patient. You can always show an interest in him."

For Dr. Sturgis the art of medicine can be taught only indirectly through example. He keeps this firmly and colorfully in mind, as anyone who has watched him lead an entourage of interns and residents down the corridor of University Hospital would agree . . . stiff white coat, soft white hair, well-groomed, friendly smile, and above all, punctuality.

These essences of the practice of medicine (some of which seem to have gone the way of the old fashioned virtues) are the pigments which contribute to the total picture of Dr. Sturgis.

I asked him about punctuality. I asked him why he was so intensely concerned about the element of time, and he replied: "Punctuality is the keynote of the Department of Internal Medicine!"

He said he was strongly influenced by his mentor, Dr. Henry Christian, at Peter Bent Brigham Hospital. It was this man who convinced Dr. Sturgis to be on time, no matter what the occasion, no matter who was waiting.

Said Dr. Marvin Pollard, one of Sturgis' close friends and students, "I honestly think that Dr. Sturgis would rather be on time than anything else."

It is in this sense, you see, that Dr. Sturgis is visualized as something of a myth. There is a certain greatness in a man, it would seem, when he can deal with the realities of daily life and yet find it in himself to respect one of the old-fashioned virtues. In the author's opinion, the man who respects time is the man who can control it. Let me illustrate:

Dr. Sturgis wrote a book on hematology—before breakfast! That's the truth. For years he wakened

at 4:30 a.m. regularly, drank his cup of coffee, and wrote his book. Later when Mrs. Sturgis and the three sons were up, the doctor would have his second, family breakfast.

He still adheres to this Spartan-like schedule. He has relaxed a bit on the waking hour. Now it is 5:00 a.m. But he is at the hospital at eight o'clock for rounds. He has a large lunch at home . . . naps for one hour . . . takes an afternoon shower, and returns to the hospital. There he stays until six o'clock. Dr. Sturgis retires regularly between 8:30 and 9:00 p.m.

Dr. Pollard again testifies: "I am on time, too. But wherever I have to be, there is Dr. Sturgis, just a few minutes ahead of me with a sharp glint in his eye. More than once he has said to me, 'Pollard, are you up for the day?' "

Perhaps you get something of the sense of the myth by now.

Dr. Kerlikowske, Director of University Hospital, told me, "Cy Sturgis does everything intensely. He works hard, and he plays hard. I never knew a man who could re-create as vigorously as he can create."

Yet to look at him, to listen to him, to carry your troubles to him, Dr. Sturgis is anything but hard. His gestures are soft, his chuckle is light, and his understanding of human nature is as gentle as a grandfather's.

This is probably due to the fact that he is a grandfather, six times over. At Grandpa's home there is a regular Sunday dinner attended by all three sons and six grandchildren.

"We have three television sets in our house," said the doctor. "One for the maid (whom I am humoring because someday she will push my wheel chair around) . . . one on the sunporch for the children . . . and one for the grown-ups."

Dr. Sturgis is a great booster of TV. He moderated a television show on hypertension out of New York not long ago. Dr. Sturgis thinks that TV is a great medical medium.

"The most serious medical problem today is to keep abreast of the advances," he said. "Do you know that there are over 100,000 medical articles written every year? How can the young doctor read them all?"

That's why, through the medium of TV, Dr. Sturgis feels great work can be done in the field of postgraduate medicine. For the doctor, television and radio are "the means of disseminating medical knowledge to the advantage of sick people."

He lists the financial plight of young residents as the second most serious medical problem, and he would like to see the establishment of a generous loan fund for these young medics.

One could go on and on about this man, Sturgis. The doctor who keeps a full set of Osler in his panelled office. Who likes to travel. Who paints with water colors. Who likes a good joke, but who would rather someone else played the straight-man. Who was one of the researchers of the drug which has licked pernicious anemia. And, who is now President of the American College of Physicians.

But I have to stop, and there is no better place to stop than with Dr. Sturgis's definition of happiness: "Happiness is derived from the sense of being needed in the world. If a man isn't needed, how the hell can he be happy?"

That's Cyrus Cressey Sturgis: Half man, half myth. But, brother, all doctor!—Louis Graff.

PERIODIC HEALTH APPRAISAL

(Continued from Page 1358)

vocating for the profession and the public this coming season is something very different from a survey. Cards outlining a complete and adequate minimal periodic health appraisal have been given out. We hope our members will carry on and give a satisfying service.

We have been notified that the Michigan Department of Health is fostering a series of surveys in certain areas and employed groups. The Council feels these are much better done by the doctors in their offices, even if the cost is a little more. They will be much more satisfactory, and will keep health services, both private and public, in their own fields.

Michigan Clinical Institute

Sheraton-Cadillac Hotel, Detroit

Wednesday-Thursday-Friday, March 9-10-11, 1955

L. J. Hirschman, M.D., Traverse City, General Chairman

Information

HEADQUARTERS—Sheraton-Cadillac Hotel: Assemblies, Exhibits and Press Room on Fourth Floor.

REGISTER—Top of stairs—Fifth Floor—as soon as you arrive.
Hours: Tuesday, March 8—1:00 p.m. to 5:00 p.m.
Wednesday, March 9—7:30 a.m. to 5:00 p.m.
Thursday, March 10—8:30 a.m. to 5:00 p.m.
Friday, March 11—8:30 a.m. to 3:30 p.m.

NO REGISTRATION FEE for Members of MSMS and other State Medical Associations, AMA, and Canadian Medical Association.

ADMISSION BY BADGE ONLY to all Assemblies, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership Card to expedite registration.

GUESTS—Members of any state medical association, AMA, or CMA members from any province of Canada and physicians of the Army, Navy, and U. S. Public Health Service are invited to attend as guests. No registration fee. Please present credentials at the Registration Desk.

Bona fide doctors of medicine who are associate or probationary members of Michigan county medical societies or who are serving as residents or interns, if vouched for by the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests, with no registration fee. Please present credentials at the Registration Desk.

- **MICHIGAN DOCTORS OF MEDICINE,** in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests upon payment of $25.00. This amount will be credited to them toward dues in the Michigan State Medical Society FOR 1955 ONLY, provided they subsequently are voted into membership by the County Medical Society in whose jurisdiction they practice.

- **DOCTOR,** register Tuesday, to save your time! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday and Friday, during the 1955 Michigan Clinical Institute. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, March 8, from 1:00 to 5:00 p.m., Fifth Floor, Sheraton-Cadillac Hotel.

- **TELEPHONE SERVICE**—Local and long distance telephone service will be available in the Sheraton-Cadillac Hotel fourth floor. In case of emergency, physicians will be paged from the meetings by announcement on the screen. Call the Sheraton-Cadillac Hotel, Detroit, Woodward 1-8000, and ask for the Michigan Clinical Institute extensions on the fourth floor.

- **CHECKROOM** is available in the Sheraton-Cadillac Hotel, fourth floor, next to Grand Ballroom.

- **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Committee on Arrangements. This request is made in order to avoid confusion and disappointment on the part of members of the audience.

- **PAPERS WILL BEGIN AND END ON TIME**—Nothing makes a scientific meeting more attractive than by-the-clock promptness and regularity; therefore, all meetings and panels will open on time, all speakers will be required to begin their talks exactly on time and to close exactly on time, in accordance with the schedule in the Program. All who attend the Institute, are respectfully requested to assist in attaining this end by noting the schedule carefully and by being in attendance accordingly, in order not to miss that portion of the program of greatest interest.

- **TECHNICAL EXHIBITS**—Seventy-four interesting and instructive displays—will open daily at 8:30 a.m. and close at 5:15 p.m., except on Friday when the exhibit breaks up at 3:30 p.m. Frequent intermissions to view the exhibits have been arranged daily before, during and after the assemblies.

- **THE SCIENTIFIC EXHIBIT** will be located in the Reception Room, adjoining the Grand Ballroom, fourth floor, Sheraton-Cadillac Hotel.

- **THERE IS SOMETHING** of interest or education in the large exhibit of technical displays. **SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN CLINICAL INSTITUTE.**

THREE DISCUSSION CONFERENCES

These quiz periods will be held Wednesday-Thursday-Friday, March 9-10-11, Grand Ballroom, Sheraton-Cadillac Hotel, 5:00 to 6:00 p.m. with all the guest speakers of the day invited to appear on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them, is thus provided.

• **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Michigan Clinical Institute. Notify H. H. Cummings, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann St., Ann Arbor, Michigan.

• **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel is available at the Book Tower Garage, 333 State, the DAC Garage, 1754 Randolph, and the Grand Circus Garage, 1776 Randolph.

• **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan Clinical Institute. All subjects on the Institute Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

• **"UBIQUITOUS HOSTS"**—The following doctors of medicine have placed themselves at the disposal of the twelve out-of-Michigan guest essayists who grace the program of the ninth annual Michigan Clinical Institute in Detroit; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the United States:

W. B. Cooksey, M.D., Detroit; Douglas Donald, M.D., Detroit; H. B. Fenech, M.D., Detroit; H. A. Luce, M.D., Detroit; A. H. Price, M.D., Detroit; C. F. Schroeder, M.D., Detroit; C. S. Stevenson, M.D., Detroit; E. C. Vonder Heide, M.D., Detroit; R. K. Whiteley, M.D., Detroit; and E. A. Wishropp, M.D., Grosse Pointe.

• **TESTIMONIAL DINNER** in honor of Frederick A. Coller, M.D., of Ann Arbor and Alexander Brunschwig, M.D., New York City, is being arranged by the Michigan Division and the Southeastern Michigan Division of the American Cancer Society and the Michigan Cancer Coordinating Committee for Wednesday, March 9, 7:00 p.m., English Room, Sheraton-Cadillac Hotel. Following dinner, Dr. Coller will speak on "Enemies of Health" and Dr. Brunschwig will talk on "Contribution of the Laity in the Fight Against Cancer."

• **TESTIMONIAL BANQUET** honoring those Michigan Doctors of Medicine who are Presidents of national medical associations is scheduled for Thursday, March 10, 6:30 p.m. in the Grand Ballroom, Sheraton-Cadillac Hotel. Those physicians who have brought honor to our State by being chosen to head national medical societies and who will be honored on March 10, are: A. C. Curtis, M.D., Ann Arbor, President, The Society for Investigative Dermatology, Inc.; L. A. Ferguson, M.D., Grand Rapids, President, American College of Gastroenterology; W. A. Hudson, M.D., Detroit, President, American College of Chest Physicians; A. C. Kerlikowske, M.D., Ann Arbor, President, American College of Hospital Administrators; H. M. Pollard, M.D., Ann Arbor, President, American Gastroscopic Society; A. D. Ruedemann, M. D., Detroit, President, American Society of Ophthalmologic Allergy; C. C. Sturgis, M.D., Ann Arbor, President, American College of Physicians; and J. E. McIntyre, M.D., Lansing, Secretary, Michigan State Board of Registration in Medicine, for his long and valuable service to the Commonwealth.

• **PRESS RELATIONS COMMITTEE** for the 1955 Michigan Clinical Institute:

C. L. Weston, M.D., Owosso, Chairman; H. F. Dibble, M.D., Detroit; A. B. Gwinn, M.D., Hastings; R. A. Johnson, M.D. Detroit; and G. B. Saltonstall M.D., Charlevoix..

• **L. J. HIRSCHMAN, M.D.**, Traverse City, is General Chairman of Arrangements for the 1955 Michigan Clinical Institute.

• **MEETING FOR RESIDENTS, INTERNS AND SENIOR MEDICAL STUDENTS**

Residents, interns and senior medical students of Michigan will be honor guests at a special meeting arranged during the 1955 Michigan Clinical Institute, on Wednesday, March 9, beginning at 2:30 p.m. This meeting in the English Room, Sheraton-Cadillac Hotel, Detroit, will include the following program:

2:00 p.m.
Registration, Fifth Floor, Sheraton-Cadillac Hotel, Detroit

2:30 to 4:00 p.m.
Meeting in English Room, Sheraton-Cadillac Hotel, Detroit
"The Second Year," by Warren R. Mullen, M.D., Pentwater, Michigan. First President of Student AMA.
Five Skits plus Phillips 66
(a) Financial Arrangements with Patients
(b) Insurance Needed by the M.D.
(c) Malpractice Prevention
(d) Advantages of a Small Community Practice
(e) Periodic Health Appraisal
Intermission to View Exhibits
Bus Transportation to Blue Cross-Blue Shield Building 441 E. Jefferson Avenue, Detroit

5:10 p.m.
Tour of Building

5:30 p.m.
"Philosophy of Voluntary Pre-Payment," by R. L. Novy, M.D., Detroit, President, Michigan Medical Service

6:15 p.m.
Reception and Buffet
Host: Michigan Medical Service

• **OPERATING ROOM NURSES MEETING.**—Through the courtesy and co-operation of the Michigan State Medical Society and the Michigan State Nurses Association, the Operating Room Nurses Conference Group of the Detroit District, Michigan State Nurses Association, is planning an ORN Conference in conjunction with the Michigan Clinical Institute which will be held in Detroit, March 9-11, 1955. All professional nurses throughout Michigan are most cordially invited to attend. Doctors are requested to send their nurses to this Conference, to improve their worth. The January and February numbers of this JOURNAL will include the program to be presented. For information, write Harriet Bell, R.N., Chairman, 51 Warren Ave. W., Detroit 1, Michigan.

MUCH THAT IS NEW AND INTERESTING WILL BE FOUND IN THE MCI EXHIBIT

THE "BLOCK SYSTEM"
at the
1955 MICHIGAN CLINICAL INSTITUTE

Surgery — Gynecology — Trauma — Wednesday morning, March 9
Trauma—Cancer Control—Wednesday afternoon, March 9
Obstetrics — Pediatrics — Internal Medicine — Thursday, March 10
Heart and Rheumatic Fever—Friday morning, March 11
General Medicine—Friday afternoon, March 11

• **ACKNOWLEDGMENTS**—The Michigan Clinical Institute gratefully acknowledges the co-operation of

1. The Michigan Regional Committee on Trauma, American College of Surgeons, sponsor of the Trauma program (eight speakers) on Wednesday afternoon, March 9.
2. The Michigan Heart Association, sponsor of the Heart and Rheumatic Fever Program (seven speakers) on Friday, March 11.
3. The Michigan Foundation for Medical and Health Education, Inc., sponsor of Alexander Brunschwig, M.D., New York City, the Foundation Lecturer.
4. The Michigan Cancer Coordinating Committee, sponsor of Frederick A. Coller, M.D., Ann Arbor, the MCCC Lecturer.
5. Michigan Medical Service and the Michigan State Medical Society—co-sponsors of the Conference for Residents, Interns and Senior Medical Students.
6. Smith, Kline and French Laboratories, Philadelphia, for sponsorship of the color television program beamed to the MCI meeting room; and Detroit's Receiving Hospital and its medical staff for co-operation in arranging and producing the 3-days' TV scientific presentations.
7. Davis & Geck, Inc., Danbury, Conn., for sponsorship of the color motion pictures shown during the MCI in the Normandie Room, Sheraton-Cadillac Hotel.
8. Michigan Medical Service, which contributes notepads for use of MCI registrants.

• MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

Tuesday, March 8, 1955

1. **The Michigan Chapter, American College of Surgeons** will meet on March 8, 1955, the day before the Michigan Clinical Institute at the Sheraton-Cadillac Hotel, Detroit, for a day of interesting papers and discussions, as well as a banquet in the evening to renew friendships, and to discuss common problems with your fellow colleagues. A good program is in the making, and we expect to have an outstanding speaker for the evening gathering. Bring yourself, tell your friends, and if you have a deserving resident in your hospital, treat him to a pleasant clinical day, as well as a pleasant evening to stimulate and encourage him in his endeavors. We look for a big turnout and a profitable time. Any questions or communications may be addressed to the Secretary-Treasurer, John Reid Brown, M.D., 706 Maccabees Building, Detroit, Michigan.

Wednesday, March 9, 1955

2. **A Conference for Residents, Interns and Senior Medical Students** is scheduled for the English Room, beginning at 2:30 p.m. A reception and buffet will be held at 5:30 p.m. with Michigan Medical Service as host.
3. **The Michigan Regional Committee on Trauma** will hold a short luncheon meeting in the Sheraton Room, 12:30 to 1:30 p.m.
4. **The Grace Hospital Reunion Dinner** is scheduled for 6:30 p.m. in the Grand Ballroom.
5. **A testimonial banquet honoring Frederick A. Coller, M.D., Ann Arbor and Alexander Brunschwig, M.D., New York City,** will be held in the English Room, 7:00 p.m.
6. **The mid-year Board meeting of the Woman's Auxiliary to the Michigan State Medical Society,** is scheduled for 9:30 a.m., Executive Suite, Second Floor, Women's City Club, 2110 Park Avenue, Detroit, with luncheon at 12:30 p.m. in the main dining room.

Thursday, March 10, 1955

7. **A Testimonial Banquet honoring Michigan Presidents of National Medical Associations** is scheduled for the Grand Ballroom, 6:30 p.m.
8. **An Operating Room Nurses Conference** will be held Thursday-Friday, March 10-11, in the English Room. This meeting is sponsored by the Operating Room Nurses Conference Group of the Detroit District, Michigan State Nurses Association. Program and information may be received from Harriet Bell, R.N., Chairman, 51 Warren Avenue W., Detroit 1, Michigan.

Friday, March 11, 1955

9. **The Annual Meeting of Members of the Michigan Heart Association** is scheduled for 6:00 p.m. in the Sheraton Room with the Board of Trustees meeting at 6:30 p.m. in the Sheraton Room.

The Wayne University Alumni Association will have a headquarters suite in the Sheraton-Cadillac Hotel, Detroit, during the 1955 Michigan Clinical Institute on Wednesday and Thursday, March 9 and 10.

GRAND RAPIDS IS HOST

The 1955 (90th) Annual Session of the Michigan State Medical Society will be held in Grand Rapids, Michigan, the week of September 25.

Sunday, Sept. 25—Council Session

Monday, Sept. 26—House of Delegates

Tuesday, Sept. 27—House of Delegates

Wednesday, Sept. 28—Scientific Sessions

Thursday, Sept. 29—Scientific Sessions

Friday, Sept. 30—Scientific Sessions

MARK THESE DATES ON YOUR CALENDAR

Michigan Clinical Institute
1955



L. J. Hirschman, M.D.

L. J. Hirschman, M.D., Traverse City, is General Chairman of Arrangements for the 1955 Michigan Clinical Institute. Doctor Hirschman is a Past President of the Michigan State Medical Society.

Program

WEDNESDAY, MARCH 9, 1955
SHERATON-CADILLAC HOTEL, DETROIT

A.M.
7:30 **REGISTRATION—Top of Stairs, Fifth Floor**

8:30 **EXHIBITS OPEN—Fourth Floor**

FIRST ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: R. H. Baker, M.D., Pontiac

Secretary: A. B. Hodgman, M.D., Kalamazoo

8:50 **WELCOME**

R. H. Baker, M.D., Pontiac
President, Michigan State Medical Society

E. H. Fenton, M.D., Detroit
President, Wayne County Medical Society

SURGERY (INCLUDING GYNECOLOGY)—TRAUMA

9:00 **"Surgical Aspects of Ulcerative Colitis"**
William S. Carpenter, M.D., Detroit
Instructor in Clinical Surgery, Wayne University College of Medicine



W. S. Carpenter, M.D.



R. R. Cooper, M.D.

"Medical Management of Ulcerative Colitis"
Ralph R. Cooper, M.D., Detroit
Associate Physician, Harper Hospital; Attending Physician, Detroit Receiving Hospital; Assistant Clinical Professor of Medicine, Wayne University; Attending Consultant, Veterans Administration Hospital, Dearborn

9:30 **"Dysfunction and Neoplasia Indicating Ovarian Surgery"**
Clyde L. Randall, M.D., Buffalo, New York
Professor of Obstetrics-Gynecology, University of Buffalo; Chief Obstetrician-Gynecologist, Buffalo General Hospital



C. L. Randall, M.D.

10:00 **"Traumatic Wet Lung"**
Richard H. Meade, M.D., Grand Rapids
Consulting Thoracic Surgeon, Blodgett Memorial Hospital, St. Mary's Hospital, Sunshine Hospital; Senior Attending Thoracic Surgeon, Butterworth Hospital; Vice President American Association for Thoracic Surgery.



R. H. Meade, M.D.

10:10 **End of First Assembly**

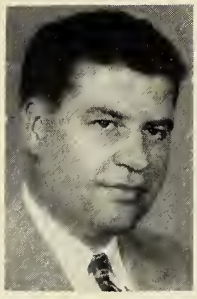
10:10 **INTERMISSION TO VIEW EXHIBITS**

11:00 to 12:30 **COLOR TELEVISION PROGRAM,** beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Receiving Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia.

11:00 **"The Use of Plaster of Paris in Common Injuries"**
THOMAS B. QUIGLEY, M.D., Boston, Massachusetts
Surgeon, Peter Bent Brigham Hospital


T. B. QUIGLEY, M.D.

11:30 **"Recognition and Early Management of Slipped Femoral Epiphysis"**
SYLVESTER J. O'CONNOR, M.D., Ann Arbor
Assistant Professor of Surgery, Orthopaedic Section, University of Michigan Medical School


S. J. O'CONNOR, M.D.

11:50 **Panel on "Open and Closed Fractures of the Tibia"**
Moderator:
CHARLES G. JOHNSTON, M.D., Detroit
Professor of Surgery, Wayne University College of Medicine; Director of Surgery, Detroit Receiving Hospital and Veterans Administration Hospital, Dearborn
Participants:
ANDREW J. DAY, M.D., Detroit
President, Detroit Academy of Orthopedic Surgery; Professor of Orthopedic Surgery, Wayne University College of Medicine; Staff of Harper, St. Joseph's and St. John's Hospitals; Consultant Herman Kiefer Hospital and Veterans Administration Hospital, Dearborn.

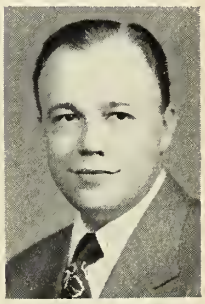

C. G. JOHNSTON, M.D.

CURTIS M. HANSON, M.D., Kalamazoo
Orthopedic Physician

DONALD F. KUDNER, M.D., Jackson


A. J. DAY, M.D.

12:30 **End of Television Program**


C. M. HANSON, M.D.

SECOND ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel
Chairman: V. C. ABBOTT, M.D., Pontiac
Secretary: H. M. SMATHERS, M.D., Detroit

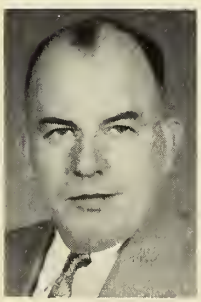

D. F. KUDNER, M.D.

TRAUMA—CANCER CONTROL

P.M.
1:30 **"Treatment of the Injured Hand in Children"**
JOSEPH L. POSCH, M.D., Detroit
Instructor in Surgery at Wayne University College of Medicine


J. L. POSCH, M.D.

1:50 **"Observations on the Fluid Needs of the Traumatized Elderly Patient"**
ROBERT E. L. BERRY, M.D., Ann Arbor
Associate Professor of Surgery, University of Michigan Medical School


R. E. L. BERRY, M.D



J. W. Rae, M.D.

2:10 "Physical Therapy in Traumatic Conditions"

James W. Rae, M.D., Ann Arbor

Chairman of Department of Physical Medicine and Rehabilitation, University of Michigan Medical School; Associate Professor, Physical Medicine and Rehabilitation, University of Michigan Medical School

2:30 "Prevention of Accidental Trauma"

George M. Wheatley, M.D., New York

Third Vice President, Metropolitan Life Insurance Co.

3:00 INTERMISSION TO VIEW EXHIBITS



G. M. Wheatley, M.D.

4:00 THE MICHIGAN CANCER COORDINATING COMMITTEE LECTURE

"Scrutiny of Progress Against Cancer"

Frederick A. Coller, M.D., Ann Arbor

Professor of Surgery and Chairman of the Department of Surgery, University of Michigan Medical School

4:30 THE MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION LECTURE

"The Surgical Treatment of Cancer of the Cervix that has Recurred after Radiation Therapy"

Alexander Brunschwig, M.D., New York, New York

Professor of Clinical Surgery, Cornell University Medical College; Attending Surgeon, Memorial Hospital for Cancer and Allied Diseases, New York City



F. A. Coller, M.D.

5:00 End of Second Assembly

5:00 DISCUSSION CONFERENCE

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: C. E. Badgley, M.D., Ann Arbor

Participants: R. E. L. Berry, M.D., Ann Arbor, Alexander Brunschwig, M.D., New York City; W. S. Carpenter, M.D., Detroit; F. A. Coller, M.D., Ann Arbor; R. R. Cooper, M.D., Detroit; A. J. Day, M.D., Detroit; C. M. Hanson, M.D., Kalamazoo; C. G. Johnston, M.D., Detroit; D. F. Kudner, M.D., Jackson; R. H. Meade, M.D., Grand Rapids; S. J. O'Conner, M.D., Ann Arbor; J. L. Posch, M.D., Detroit; T. B. Quigley, M.D., Boston, Mass.; C. L. Randall, M.D., Buffalo, New York; J. W. Rae, M.D., Ann Arbor; and G. M. Wheatley, M.D., New York City.



A. Brunschwig, M.D.

6:00 End of Discussion Conference

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No Michigan Clinical Institute Meeting Wednesday Evening

THURSDAY, MARCH 10, 1955

Sheraton-Cadillac Hotel

A.M.

8:30 REGISTRATION—Top of Stairs, Fifth Floor
EXHIBIT OPEN—Fourth Floor

THIRD ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: J. R. Heidenreich, M.D., Daggett

Secretary: E. W. Blanchard, M.D., Deckerville

OBSTETRICS—PEDIATRICS—INTERNAL MEDICINE

9:00 "Program of Therapy for Repeated Abortion Patients"

Carl T. Javert, M.D., New York City

Associate Professor of Obstetrics and Gynecology, Cornell University Medical College; Attending Obstetrician and Gynecologist, New York Hospital; Pathologist, New York Lying-In-Hospital



C. T. Javert, M.D.

9:30 "The Plasma Proteins in Pregnancy—Some New Clues to Obstetric and Pediatric Pathology"

Harold C. Mack, M.D., Detroit

Chief, Department of Obstetrics and Gynecology, Harper Hospital; Associate Professor, Obstetrics and Gynecology, Wayne University College of Medicine

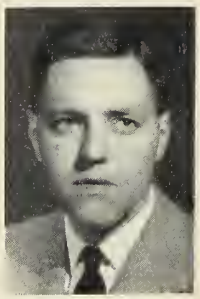


H. C. Mack, M.D.

9:50 "Use and Abuse of Fluid Therapy"

Bruce D. Graham, M.D., Ann Arbor

Associate Professor of the Department of Pediatrics and Communicable Diseases; Director of the Pediatric Laboratories, University of Michigan Medical School.



B. D. Graham, M.D.

10:10 End of Third Assembly

10:10 INTERMISSION TO VIEW EXHIBITS

11:00 to 12:30 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Receiving Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia.

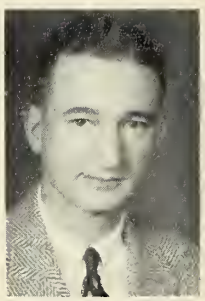


C. E. Badgley, M.D.

11:00 "The Significance of the Retention of Fetal Positions"

Carl E. Badgley, M.D., Ann Arbor

Professor of Surgery, Department of Orthopaedics, University of Michigan



S. Fajans, M.D.

11:20 "Clinic Conference on Endocrinology"

Stefan S. Fajans, M.D., Ann Arbor

Assistant Professor of Internal Medicine, University of Michigan Medical School

Holbrooke S. Seltzer, M.D., Ann Arbor

Department of Medicine, University of Michigan



H. S. Seltzer, M.D.

11:50 "Respiratory Diseases in Infancy"

James L. Wilson, M.D., Ann Arbor

Professor of Pediatrics and Communicable Diseases, University of Michigan; Chairman of Department of Pediatrics and Communicable Diseases, University Hospital



J. L. Wilson, M.D.



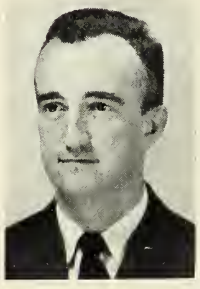
A. E. Hammond, M.D.



W. A. Evans, Jr., M.D.



T. Francis, Jr., M.D.



W. H. Beierwaltes, M.D.



T. G. Klumpp, M.D.



W. Dock, M.D.



H. Selye, M.D.

12:10 **"Demonstration of Esophageal Speech Following Total Laryngectomy"**

Arthur E. Hammond, M.D., Detroit
Surgeon, Otolaryngology, Harper Hospital; Associate Professor of Otolaryngology, Wayne University; Surgeon, Otolaryngology, Receiving Hospital; Surgeon, Otolaryngology, Children's Hospital

12:30 **End of Television Program**

FOURTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: J. W. Rice, M.D., Jackson
Secretary: C. A. Neafie, M.D., Pontiac

OBSTETRICS—PEDIATRICS—INTERNAL MEDICINE

P.M.

1:30 **"Normal Variance in Pediatric Radiologic Examinations"**

William A. Evans, Jr., M.D., Detroit
Radiologist at Children's Hospital of Michigan

1:50 **"Prospects for the Prevention of Polio"**

Thomas Francis, Jr., M.D., Ann Arbor
Henry Sewall University Professor of Epidemiology; Chairman of the Department of Epidemiology, School of Public Health and Professor of Epidemiology, Department of Pediatrics and Communicable Diseases, University of Michigan Medical School

2:10 **"Radioactive Isotopes in Your Practice Today"**

William H. Beierwaltes, M.D., Ann Arbor
Associate Professor of Internal Medicine; Co-ordinator, Clinical Isotope Unit, University Hospital

2:30 **"The Pharmaceutical Manufacturers' Interest in the Practice of Medicine"**

Theodore G. Klumpp, M.D., New York City
President, Winthrop-Stearns, Inc.

3:00 **INTERMISSION TO VIEW EXHIBITS**

4:00 **"Atherosclerosis"**

William Dock, M.D., Brooklyn, New York
Professor of Medicine, State University of New York College of Medicine at N.Y.C., Brooklyn, New York

4:30 **"The Stress Syndrome"**

Hans Selye, M.D., Montreal, Quebec, Canada
Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montreal, Montréal, Canada

5:15 **End of Fourth Assembly**

5:15 **DISCUSSION CONFERENCE**

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: D. F. Strohschein, M.D., Detroit
Participants: C. E. Badgley, M.D., Ann Arbor; W. H. Beierwaltes, M.D., Ann Arbor; William Dock, M.D., Brooklyn, New York; W. A. Evans, Jr., M.D., Detroit; Thomas Francis, Jr., M.D., Ann Arbor; Bruce Graham, M.D., Ann Arbor; A. E. Hammond, M.D., Detroit; T. G. Klumpp, M.D., New York City; C. T. Javert, M.D., New York City; H. C. Mack, M.D., Detroit; Stefan S. Fajans, M.D., Ann Arbor; H. S. Seltzer, M.D., Ann Arbor; Hans Selye, M.D., Montreal, Quebec, Canada; and J. L. Wilson, M.D., Ann Arbor.

6:15—**End of Discussion Conference**

No Michigan Clinical Institute Meeting Thursday Evening

FRIDAY, MARCH 11, 1955

Sheraton-Cadillac Hotel

A.M.

8:30 REGISTRATION—Top of Stairs, Fifth Floor
EXHIBITS OPEN—Fourth Floor

FIFTH ASSEMBLY

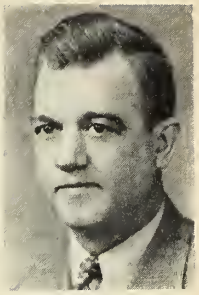
SIXTH ANNUAL MICHIGAN HEART DAY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: L. P. Ralph, M.D., Grand Rapids
Secretary: Frank Van Schoick, M.D., Jackson

HEART AND RHEUMATIC FEVER

9:00 **"Hypertension"**
Eugene B. Ferris, M.D., Atlanta, Georgia
Professor of Medicine and Chairman, Department of Medicine, Emory University School of Medicine; Chief, Medical Service, Grady Memorial Hospital


E. B. Ferris, M.D.

9:30 **"Chemotherapy in Treatment of Rheumatic Fever"**
Norman E. Clarke, M.D., Detroit
Attending Physician, Providence Hospital; Chairman of the Department of Research, Providence Hospital


N. E. Clarke, M.D.

9:45 **"Cardiacs in Industry"**
John G. Bielawski, M.D., Detroit
Medical Director, Michigan Heart Association


J. G. Bielawski, M.D.

10:00 **End of Fifth Assembly**

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 to 12:30 **COLOR TELEVISION PROGRAM,** beamed to the Grand Ballroom, Sheraton-Cadillac Hotel, through the co-operation of the medical and surgical staffs of Receiving Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia.

Moderator:
Saul Rosenzweig, M.D., Detroit
Associate Professor of Clinical Medicine, Wayne University College of Medicine; Attending Physician, Receiving Hospital

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S. Rosenzweig, M.D.

"The Use of Cardiac Catheterization in the Diagnosis of Heart Disease"
Harper K. Hellems, M.D., Detroit
Assistant Professor of Medicine, Wayne University Research Laboratory at Wayne University College of Medicine and Detroit Receiving Hospital

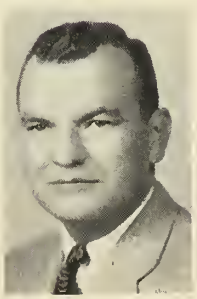
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"Cardiac Surgery"
Prescott Jordan, Jr., M.D., Detroit
Assistant Professor of Surgery, Wayne University College of Medicine; Associate Surgeon at Receiving Hospital
With Surgical Commentator:
Charles G. Johnston, M.D., Detroit
Professor of Surgery, Wayne University College of Medicine; Director of Surgery at Receiving Hospital

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H. K. Hellems, M.D.

"Angio Cardiography"
Harold E. Fulton, M.D., Detroit
Radiologist, Harper Hospital


H. E. Fulton, M.D.

12:30 **End of Television Program**



H. A. Howes, M.D.



A. C. Furstenberg, M.D.



F. B. Fralich, M.D.



W. B. Hildebrand, M.D.



L. H. Bartemeier, M.D.



G. L. Carroll, M.D.



Morris E. Davis, M.D.

SIXTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: F. P. Rhoades, M.D., Detroit

Secretary: H. G. Benjamin, M.D., Grand Rapids

GENERAL MEDICINE

P.M.

1:30 **"The Present-Day Concepts of the Use of Cortisone, Hydrocortisone, and ACTH in the Treatment of Allergic Diseases"**

Homer A. Howes, M.D., Detroit

Assistant Clinical Professor of Medicine, Wayne University College of Medicine; Physician, Harper Hospital, Detroit; Attending Consultant, Veterans' Hospital, Dearborn

1:50 **"The Diagnosis and Treatment of Vertigo"**

Albert C. Furstenberg, M.D., Ann Arbor

Dean of the Medical School and Professor and Chairman of the Department of Otolaryngology, University of Michigan Medical School

2:10 **"Eye Changes in Systemic Disease"**

F. Bruce Fralick, M.D., Ann Arbor

Professor of Obstetrics and Gynecology and Chairman of Department, University of Chicago and Chicago Lying-in Hospital

2:30 **"What's New in Office Management"**

William B. Hildebrand, M.D., Menasha, Wisconsin

President, American Academy of General Practice

3:00 **FINAL INTERMISSION TO VIEW EXHIBITS**

3:30 **"Interpersonal Relations in the Practice of Medicine"**

Leo H. Bartemeier, M.D., Baltimore, Maryland

Medical Director The Seton Institute, Baltimore, Maryland; Chairman, Committee on Mental Health, AMA

4:00 **(Subject to be announced.)**

Morris E. Davis, M.D., Chicago, Illinois

Professor of Obstetrics and Gynecology and Chairman of Department, University of Chicago and Chicago Lying-in Hospital

4:30 **"Treatment of Urinary Infections—The Effect of the Changing Flora in this Antibiotic Age"**

Grayson L. Carroll, M.D., St. Louis, Missouri

Associate Professor of Clinical Urology, St. Louis University School of Medicine; Associate Chief of Staff, St. John's Hospital; Member Examining Board, American Board of Urology (since 1947): Governor (1953) American College of Surgeons

5:00 **End of Sixth Assembly**

5:00 **DISCUSSION CONFERENCE**

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: M. S. Chambers, M.D., *Flint*

Participants: L. H. Bartemeier, M.D., Baltimore, Md.; J. G. Bielawski, M.D., Detroit; G. L. Carroll, M.D., St. Louis, Missouri; N. E. Clarke, M.D., Detroit; E. B. Ferris, M.D., Atlanta, Georgia; F. B. Fralick, M.D., Ann Arbor; Harold E. Fulton, M.D., Detroit; A. C. Furstenberg, M.D., Ann Arbor; Harper K. Hellems, M.D., Detroit; W. B. Hildebrand, M.D., Menasha, Wisconsin; H. A. Howes, M.D., Detroit; Prescott Jordan, Jr., M.D., Detroit, and Saul Rosenzweig, M.D., Detroit.

6:00 **End of Discussion Conference and the 1955 Michigan Clinical Institute**

1955 MICHIGAN CLINICAL INSTITUTE COMMITTEE ON ARRANGEMENTS AND PROGRAM

L. J. Hirschman, M.D., Traverse City, *Chairman*
C. E. Badgley, M.D., Ann Arbor, *Vice Chairman*
R. H. Baker, M.D., Pontiac, *President, MSMS*
L. W. Hull, M.D., Detroit, *Immediate Past President, MSMS*
L. Fernald Foster, M.D., Bay City, *Secretary*
Representing Michigan State Medical Society

* * *

F. A. Coller, M.D., Ann Arbor
H. H. Cummings, M.D., Ann Arbor
John M. Sheldon, M.D., Ann Arbor
H. A. Towsley, M.D., Ann Arbor
Representing University of Michigan School of Medicine and University of Michigan Department of Postgraduate Medicine

* * *

G. C. Penberthy, M.D., Detroit
W. S. Reveno, M.D., Detroit
F. P. Rhoades, M.D., Detroit
D. F. Strohschein, M.D., Detroit
Representing Wayne University College of Medicine and Wayne County Medical Society

* * *

E. W. Blanchard, M.D., Deckerville
G. A. Drake, M.D., Petoskey
J. W. Rice, M.D., Jackson
John R. Heidenreich, M.D., Daggett
H. G. Benjamin, M.D., Grand Rapids
A. B. Hodgman, M.D., Kalamazoo
H. F. Mattson, M.D., Hillsdale
Representing Out-State Practitioners, members of the MSMS

* * *

A. E. Heustis, M.D., Lansing
C. A. Neafie, M.D., Pontiac
Representing Michigan Department of Health and Michigan Health Officers Association

* * *

E. I. Carr, M.D., Lansing
Representing the Michigan Foundation for Medical & Health Education Inc.

* * *

W. B. Cooksey, M.D., Detroit
Representing the Michigan Heart Association

* * *

V. C. Abbott, M.D., Pontiac
Representing American College of Surgeons Regional Committee on Trauma

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Sub-Committee on Program (1955)
Carl E. Badgley, M.D., Ann Arbor, *Chairman*
G. C. Penberthy, M.D., Detroit
Wm. S. Reveno, M.D., Detroit
H. A. Towsley, M.D., Ann Arbor
H. H. Cummings, M.D., Ann Arbor

HOTEL RESERVATIONS

MICHIGAN CLINICAL INSTITUTE

Detroit, March 9-10-11, 1955

The reservation blank below is for your convenience in making your hotel reservation in Detroit. Please send your application to W. L. Stodghill, Resident Manager, Sheraton-Cadillac Hotel, Detroit 31, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels
Michigan Clinical Institute
c/o Sheraton-Cadillac Hotel
Detroit 31, Michigan

Attention: Mr. W. L. Stodghill, Resident Manager.

Please make hotel reservation (s) as indicated below:

.....Single Room(s)

.....Double Room(s) for .....persons

.....Twin-Bedded Room(s) for.....persons

Arriving March.....hour.....A.M.....P.M.

Leaving March.....hour.....A.M.....P.M.

Hotel of First Choice: .....

Second Choice: .....

Names and addresses of all applicants including person making reservation:

Name	Address	City	State
.....	.....	.....	.....
.....	.....	.....	.....
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.....	.....	.....	.....
.....	.....	.....	.....

Date ..... Signature .....

Address ..... City .....

POSTGRADUATE CONTINUATION COURSES

Wayne University College of Medicine

Second Quarter

December 6, 1954 to March 12, 1955

These courses are open to all qualified persons.

Veterans receiving benefits under the GI Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5524 Cass Avenue.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1401 Rivard.

Title of Course	*Place*	*Time*	*Fee*
	MICROBIOLOGY		
Seminar	College of Medicine	Tues. 3:30-5	$15.00
	PHYSIOLOGY AND PHARMACOLOGY		
Seminar	College of Medicine	Tues. 4-5	$15.00
	PHYSIOLOGICAL CHEMISTRY		
Biochemical Applications of Radioactive Isotopes	College of Medicine	Wed. 1-2 Fri. 1-4	$30.00
Seminar	College of Medicine	Wed. 3:30-4:30	$15.00
Intermediary Metabolism	College of Medicine	Fri. 1-2	$15.00
	PATHOLOGY		
Advanced Hematology (Limit 5)	College of Medicine	Mon. 1-5	$50.00
Bone and Joint Diseases	College of Medicine	Wed. 1-5	$50.00
Neuropathology (Limit 6)	College of Medicine	Fri. 1-5	$50.00
	DERMATOLOGY		
Seminar	Receiving Hospital	Wed. 10-12	$15.00
	INTERNAL MEDICINE		
Medical Conference (Limit 15)	College of Medicine 4th Floor Lecture Room	Mon. 5-6	$15.00
Therapeutic Conference (Seminar on new drugs)	Receiving Hospital 243 Farwell Annex	Fri. 5-6	$15.00
Gastroenterologic Clinic (Limit 10)	Receiving Hospital 243 Farwell Annex	Sat. 8-9	$15.00
Medical Seminar	Receiving Hospital 243 Farwell Annex	Mon. 5-6	$15.00
Medical X-Ray Conference (Limit 10)	Receiving Hospital 243 Farwell Annex	1st, 3rd and 5th Tues. 11-12	$15.00
Medical Pathologic Conference (Limit 10)	Receiving Hospital 243 Farwell Annex	Wed. 11-12	$15.00
Hematology Clinic	Receiving Hospital Med. OPD. Farwell Annex	Wed. 1-3	$15.00
Review of Clinical Hematology	Receiving Hospital 201 Farwell Annex	Wed. 3:30-5	$15.00
Electrocardiographic Conference	Receiving Hospital 243 Farwell Annex	2nd and 4th Tues. 11-12	$15.00
	SURGERY		
Seminar	645 Mullett—4th Floor	Mon. 4-5	$15.00
	ONCOLOGY		
Cancer Detection	Yates Clinic	Wed. 3-5	$25.00

89th Annual Session Tops All Others

With a registration record just short of 4,000, a program presenting twenty-seven of the nation's finest medical lecturers, an exhibit featuring ninety-nine displays of the very latest in medical necessities, and a House of Delegates meeting which developed a forward-looking program in short order, the 1954 Annual Session has been written into MSMS history as the "best yet" in several ways.

In addition to the superior scientific program and the smooth-running policy-making sessions, meetings of a great many related organizations and ancillary groups were held concurrently with the Annual Session which added interest. Several social activities added spice.

This year, more than ever before, coverage by newspapers, radio and television, and a host of appearances before civic clubs, brought the story of medical progress and the views of the medical profession before the general public. Throughout the week of the Annual Session, every news medium in Michigan carried daily accounts of events.

Tops in general interest were the various honors distributed during the 89th Annual Session. Most noteworthy was the unheralded election of L. Fernald Foster, M.D., of Bay City, as President-for-a-Day. This recognition was voted by the House of Delegates for Dr. Foster's long standing record as Secretary of MSMS. Only two others have ever received this honor.

Another outstanding honor, presented with little fanfare, was awarded to Donald E. Johnson of Flint, publisher of the *Flint News-Advertiser*. Mr. Johnson was made an honorary member of MSMS in recognition of his unusual contributions in the field of cancer control on the local, state and national levels. The extent of Mr. Johnson's activities will be outlined in greater detail in a future issue of THE JOURNAL.

Duncan J. McColl, M.D., of Port Huron, was named "Michigan's Foremost Family Physician, 1954" by action of the House of Delegates. A biographical sketch of Dr. McColl appears elsewhere in this issue.

Eight new members, four of whom were present to be greeted in person, were inducted into the MSMS "Fifty-Year Club." They were George H. Boyce, M.D., of Iron Mountain; C. D. Chapin, M.D., of Columbiaville; Clarence Hathaway, M.D., of Lake Orion, and the following five from Detroit: Albert E. Bernstein, M.D., William E. Blodgett, M.D., Herman C. Emmert, M.D., Charles S. Norton, M.D., and DeWitt L. Sherwood, M.D.

Two nationally prominent doctors of medicine spoke on non-scientific topics at the Officers Night program and drew a full house. They were Charles W. Mayo, M.D., of Rochester, Minnesota, Biddle lecturer, who discussed "The United Nations: Our Hope for the Future," and Elmer Hess, M.D., of Erie, Pennsylvania, President-elect of the American Medical Association. Dr. Hess presented the AMA viewpoint on veterans' medical care.

This year the medical alumni of both Wayne University and the University of Michigan held reunion dinners for the first time at any Annual Session.

Walter A. Fansler, M.D., of Minneapolis, Minnesota, presented the Second Annual Beaumont Memorial Lecture. The lecture, dedicated to the pioneer William Beaumont, M.D., dealt with a gastroenterological subject.

General Practice Day—another "first" inaugurated in 1953—was observed again this year. An entire day was set aside for the GP, with a variety of topics tailored to his particular interest.

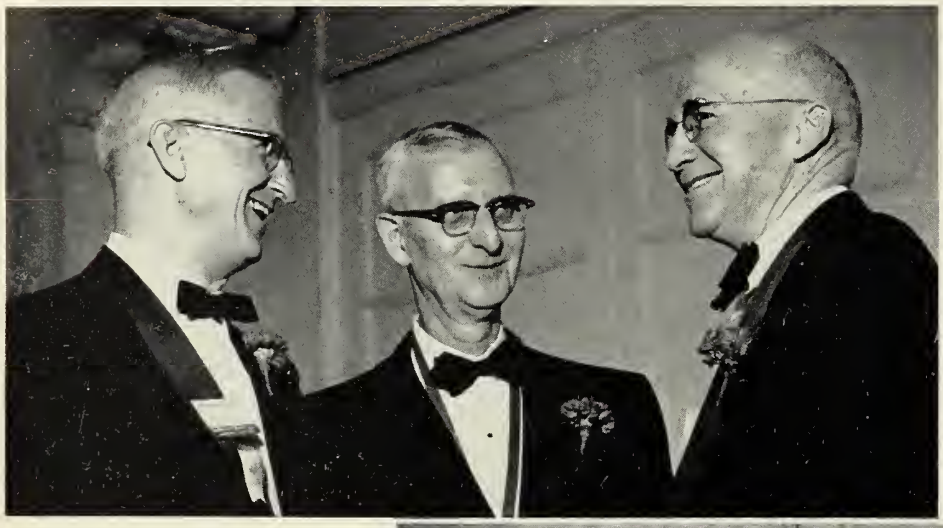
All in all, the 89th Annual Session was not only the greatest in total registration, but it was also the greatest Annual Session in a number of other ways.

NEW ATTENDANCE RECORD

Here's a breakdown of the registration at the 1954 Annual Session, which topped the previous record of 3,605, set in 1952.

Doctors of Medicine	2,295
Woman's Auxiliary Members	171
Medical Assistants Society Members	372
Guests (including nurses)	534
Exhibitors	532
TOTAL	3,904

The 1954 Annual Session

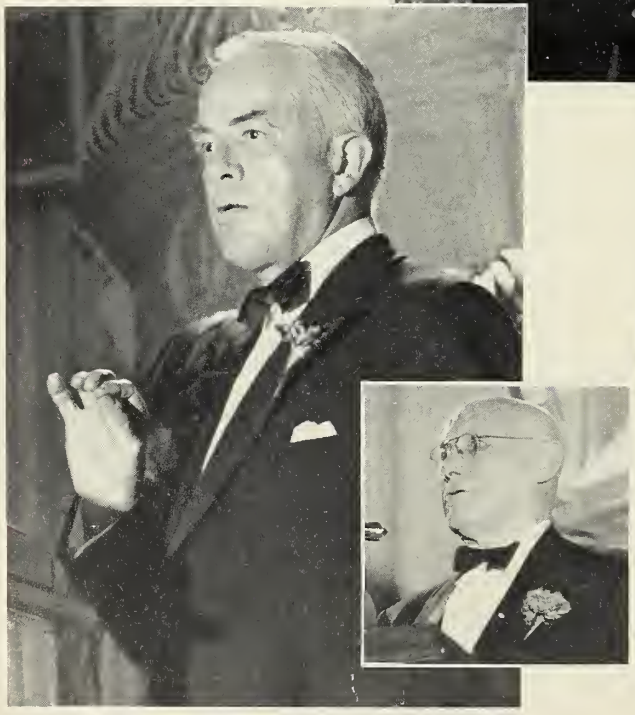


LEADERSHIP past, present and future: President-elect W. S. Jones, M.D., Menominee; President Robert H. Baker, M.D., Pontiac; Past President L. W. Hull, M.D., Detroit.

RETIRING PRESIDENT L. W. Hull, M.D. (right), receives scroll from Council Chairman William Bromme, M.D., Detroit.



CHARLES W. MAYO, M.D., Rochester, Minn., was top speaker at Officers Night, followed by AMA President-elect Elmer Hess, M.D., Erie, Pa. (inset).







SPEAKER Jackson E. Livesay, M.D., Flint, efficiently presided over the House of Delegates, capably assisted by Vice Speaker Kenneth H. Johnson, M.D., Lansing (below).

A Photographic "Who's Who"

THE RARE HONOR OF MSMS President-for-a-Day has been bestowed only on these three: (l. to r.) Robert L. Novy, M.D., Detroit, President of Michigan Medical Service, in 1952; Wilfrid Haughey, M.D., Battle Creek, JOURNAL Editor, in 1949, and L. Fernald Foster, M.D., Bay City, MSMS Secretary, named by the 1954 House of Delegates.

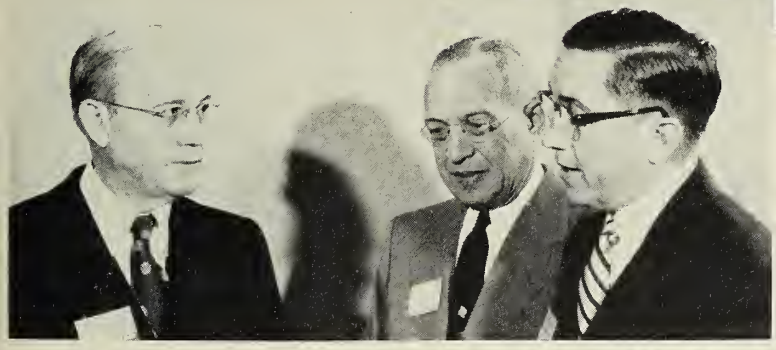




TO DONALD E. JOHNSON (speaking), Flint newspaper publisher, went the privilege of Honorary Membership in MSMS for his efforts in the cancer control field. Speaker Livesay listens attentively.



OTTO O. BECK, M.D., Birmingham (right), received a scrapbook and scroll from President Hull. President-for-a-Day Foster looks on.



WALTER A. FANSLER, M.D., Minneapolis, Minn. (left), received traditional scroll after presenting second annual Beaumont Memorial Lecture. Ralph M. Burke, M.D., Detroit (right), Gastroenterology Section Chairman, and General Chairman William S. Reveno, M.D., Detroit, made the award.



THREE who have each served Michigan for a half-century prepare to become members of the "50-Year-Club." Left to right: C. D. Chapin, M.D., Columbiaville; William E. Blodgett, M.D., Detroit, and Herman C. Emmert, M.D., Detroit. Five others were inducted.



CLIMAX of the three-day Woman's Auxiliary Annual Convention came at luncheon where new officers were installed. At the head table Mrs. A. F. Milford, Ypsilanti (left), new President, and her predecessor, Mrs. W. S. Stinson, Bay City, chatted with Mrs. George Turner, El Paso, Texas (right), AMA Auxiliary President and guest of honor.



COMMITTEE CHAIRMEN who directed plans for the University of Michigan Medical School alumni dinner were (left to right): Cyrus C. Sturgis, M.D.; John M. Sheldon, M.D., and Reed M. Nesbit, M.D., all of Ann Arbor.



WAYNE UNIVERSITY medical alumni met for dinner and a talk by Donald E. Leonard (center). Renewing acquaintances are Homer D. Strong (left), Wayne Alumni Secretary, and John E. Webster, M.D., Detroit, President of the group.



THE MOST SUCCESSFUL Michigan State Medical Assistants Society convention was held concurrently with the Annual Session. Charlotte Ash (center) became President and Phyllis Marquardt, Corresponding Secretary. Ralph W. Shook, M.D., was named Chairman of the Advisory Committee to MSMAS. All three are from Kalamazoo.



MICHIGAN BRANCH, American Academy of Pediatrics, held a memorable all-day meeting. Centering the head table at dinner were (left to right): G. E. Anthony, M.D., Flint; Isadore Lampe, M.D., Ann Arbor, the speaker, and Harry A. Towsley, M.D., Ann Arbor.



OFFICERS of the Michigan Academy of General Practice met informally with their guest speaker, Paul de Kruif (center), before dinner. (Left to right) F. P. Rhoades, M.D., Detroit; Karl L. Swift, M.D., Detroit; Mr. de Kruif; John W. Rice, M.D., Jackson, and E. C. Long, M.D., Detroit.



NEWS COVERAGE of the 1954 Annual Session by all media was greater than ever before. Checking the Press Room clipping board at mid-week is Ralph A. Johnson, M.D., Detroit, Chairman of the Scientific Press Relations Committee. He directed the smooth and constant flow of news.



THE "BIG THREE" of the Detroit press covering the Annual Session "check signals" in a Press Room huddle with Secretary Foster. Left to right: Merle Oliver, *News;* Jean Pearson, *Free Press;* DR. Foster, and Jack Pickering, *Times.*



TELEVISION coverage was unusual. High point was soundfilm interview for WJBK-TV's Murray Young (far left) among Drs. Johnson, Baker, Mayo, and Hull (left to right).



USING a wall mirror for a "trick shot," the photographer caught the busy MSMS public relations staff together at one time in the Press Room on closing day. They are (left to right): Stuart A. Campbell, A. DeWitt Brewer, Jean MacDonald, Warren F. Tryloff, and Hugh W. Brenneman, PR Counsel.

Duncan J. McColl, M.D.

"Michigan's Foremost Family Physician, 1954"

Duncan J. McColl, M.D., is a gentleman of dignity and great modesty; a kindly, quiet-spoken Scotsman who has devoted 61 years to the practice of medicine. Upon him The House of Delegates bestowed the title "Michigan's Foremost Family Physician for 1954."

Forty of these years have been spent in Port Huron, where he is one of the city's best-known and most-beloved residents. Alert, erect and confident, Dr. McColl still engages in the day-to-day practice of medicine. He is reputed to have delivered 8,000 babies, although in recent years he has limited himself to "fewer than 100 deliveries per year."



DUNCAN J. McCOLL, M.D.
Officers' Night crowd greeted him warmly

Dr. McColl's bearing is not that of the ordinary man who is approaching age 86. He is much younger in outlook than his years suggest, and although he can remember riding horseback over muddy country roads to visit those who needed his services, Dr. McColl is not one to reminisce over "the old days." He is much too busy keeping up with the progress of modern medicine to think of dwelling in the past.

Born in Glachan, Ontario, Dr. McColl completed his early schooling at Aldboro and Chatham, Ontario, before attending business school at Ann Arbor. Then he taught school for three years in his native Ontario before entering Detroit College of Medicine in 1889.

Upon receiving his M.D. in May, 1893, Dr. McColl set up practice in Elkton, a thriving community in the Thumb Area, where he remained for 13 years. During his years there, Dr. McColl became the first President of the newly incorporated Village of Elkton, served on the local school board for nine years (including two years as President), and in other ways became a community leader.

After six more years of practice in nearby Croswell, and two years in the out-patient clinic of St. Joseph's Hospital, Milwaukee, Wis., Dr. McColl moved to Port Huron, establishing his practice there in 1914. Although a general practitioner all his years, Dr. McColl has always emphasized obstetrics.

For many years Dr. McColl's brother, the late Neil J. McColl, M.D., also practiced in Port Huron. A son, Clarke M. McColl, M.D., practiced for a few months with his father, then became a member of the staff at Henry Ford Hospital, Detroit, where he serves today as an internist. Another son, Duncan J. McColl, Jr., was elected to the Circuit Court bench in April, 1953, but died the following July, six months before taking office. He also lived in Port Huron.

Dr. McColl's wife, whom he married in 1896, died in 1934.

Dr. McColl is a charter member of the Port Huron Kiwanis Club, and was its President in 1935. In 1944, he received the club's Distinguished Service Award, and is now a Life Member. He is also a Life Member of the Masonic Order and has been a 32nd Degree Mason and Shriner since 1902.

SCHEDULE OF PUBLIC PRESENTATIONS DURING 1954 ANNUAL SESSION

Service Club Speakers

Speakers	*Topic*	*Club*
MONDAY, SEPT. 27		
Robert H. Baker, M.D., Pontiac, Michigan	"The Medical Society's Responsibility to the People"	U. & I. Club
TUESDAY, SEPT. 28		
Ralph A. Johnson, M.D., Detroit, Michigan	"A Doctor Looks at Doctors"	Downtown Lions Club
William P. Curtiss, M.D., Detroit, Michigan	"The Problems of the Aging"	Westown Lions Club
WEDNESDAY, SEPT. 29		
Charles W. Mayo, M.D., Rochester, Minnesota	"The Doctor, the AMA and Public Opinion"	Detroit Rotary Club
William Bromme, M.D., Detroit, Michigan	"What Kind of Doctor Do You Want"	Vortex Club of Detroit
Arch Walls, M.D., Detroit, Michigan	"Ills of Medicine"	Optimist Club of Detroit
W. S. Jones, M.D., Menominee, Michigan	"Looking Forward"	Civic Club of Detroit
E. F. Dittmer, M.D., Detroit, Michigan	"Your Doctor and You"	Art Centre Kiwanis
Orlen J. Johnson, M.D., Bay City, Michigan	"Is There a Changing Relationship Between the Public and the Medical Profession?"	Civitan Club of Detroit
THURSDAY, SEPT. 30		
C. Allen Payne, M.D., Grand Rapids, Michigan	"Cancer"	Uptown Lions Club
George W. Slagle, M.D., Battle Creek, Michigan	"Your Health is Important Business"	American Business Club
John R. Rodger, M.D., Bellaire, Michigan	"New Role of Family Physician"	Zonta Club of Detroit

Radio and Television

Speakers	*Topic*	*Station*
SATURDAY, SEPT. 18	State Grange Program	Station WKAR, East Lansing
H. W. Brenneman, Lansing, Michigan	Report on MSMS Session	
TUESDAY, SEPT. 21	11:00 Newscast	Station WJBK—TV, Detroit
	Film report of Annual Session Press Dinner	
SUNDAY, SEPT. 26	Court of Health	Station WJBK—TV, Detroit
Leroy W. Hull, M.D., Detroit, Michigan William S. Reveno, M.D., Detroit, Michigan	J. E. Livesay, M.D. Flint, Michigan	
THURSDAY, SEPT. 30	11:00 Newscast	Station WJBK—TV, Detroit
	Film Interview	
C. W. Mayo, M.D., Rochester, Minnesota L. W. Hull, M.D., Detroit, Michigan	R. H. Baker, M.D., Pontiac, Michigan R. A. Johnson, M.D., Detroit, Michigan	
SUNDAY, OCT. 3	Court of Health	Station WJBK—TV, Detroit
Duncan J. McColl, M.D., Port Huron, Michigan "Michigan's Foremost Family Physician, 1954"	Clarke McColl, M.D. Detroit, Michigan	

Michigan State Medical Society

Eighty-Ninth Annual Session—1954

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MSMS House of Delegates—1954

Summary of Proceedings

The 89th Annual Session of the Michigan State Medical Society's House of Delegates was held in Detroit, September 27-28, 1954.

The House of Delegates:

1. Adopted with thanks the Speaker's Address, the President's Address, the President-Elect's Address, the report of Delegates to the American Medical Association, the Annual Reports of The Council including Annual Reports of Committees of The Council, and the Annual Report of the Woman's Auxiliary to the Michigan State Medical Society.
2. Adopted Annual Reports of all Standing Committees and of all Special Committees of the Society.
3. Elected Duncan J. McColl, M.D., Port Huron, as Michigan's Foremost Family Physician for 1954.
4. Elected L. Fernald Foster, M.D., Bay City, as President for a Day.
5. Adopted Resolutions concerning:
   (a) Honorary Membership to Don E. Johnson, Flint.
   (b) Migrant Workers (amended).
   (c) Panel with Medical School Deans on undergraduate medical education.
   (d) County Medical Society responsibility in medical civil defense (amended).
   (e) Traffic safety (amended).
   (f) Extension of MSMS Periodic Health Appraisal Program.
   (g) Memorial in JMSMS to the late E. D. Spalding, M.D.
   (h) Commendation to A. E. Heustis, M.D., Michigan Health Commissioner (amended).

   Referred to
   (a) The Council, a resolution re periodic health examination by hospital staffs.
   (b) Michigan's AMA Delegates, a resolution re expansion of AMA administrative facilities.
   (c) Michigan's AMA Delegates, a resolution to study by AMA of general practice.
   (d) Medical Advisory Committee to Michigan Medical Service, part II of a resolution re increase in fees for anesthetists.
   (e) Committee on Study of Basic Science Act, a resolution re greater uniformity by Basic Science Boards.

   Adopted substitute resolutions concerning:
   (a) Blue Shield fees for surgical assistants (in lieu of two resolutions introduced).
   (b) Information by Blue Cross-Blue Shield to contract holders.
6. Adopted amendments to MSMS By-Laws:
   (a) Affecting membership qualifications, in Chapter 5, Sec. 3-f; Chapter 5, Sec. 3-g; Chapter 5, Sec. 4; Chapter 5, Sec. 5; Chapter 5, Sec. 8; Chapter 6, Sec. 6; Chapter 8, Sec. 1; and Chapter 15, Sec. 2.
   (b) Changing name of Mental Hygiene Committee to "Mental Health Committee," in Chapter 10, Sec. 3.
7. Disapproved resolutions concerning:
   (a) Request to insurance companies to study fees for anesthetists (part I of this resolution).
   (b) Study by hospital staffs of Blue Cross utilization.
   (c) Discontinuance of Veterans Administration home-town medical care program.
   (d) Public relations funds.
   (e) Liberalization of Blue Shield benefits.
   (f) Revision of Blue Shield fee schedule.
   (g) Division of fees.
8. Elected to Special Memberships:
   (a) Seventeen members to Life Membership: R. H. Bookmyer, M.D., Detroit; G. H. Boyce, M.D., Iron Mountain; C. D. Chapin, M.D., Columbiaville; F. A. Forney, M.D., Gaylord; A. M. Giddings, M.D., Battle Creek; R. J. Hardstaff, M.D., Grosse Pte.; G. C. Hardy, M.D., Rochester; R. B. Hasner, M.D., Royal Oak; C. L. Hathaway, M.D., Lake Orion; W. B. Lewis, M.D., Battle Creek; David Littlejohn, M.D., Eloise; A. H. Miller, M.D., Gladstone; J. M. Robb, M.D., Detroit; A. G. Stanka, M.D., Grand Ledge; W.S. Summers, M.D., Detroit; J. S. Wendel, M.D., Detroit; and C. S. Wilson, M.D., Detroit.
   (b) Thirteen members to Retired Membership: U. S. Bagley, M.D., Saginaw; D. A. Bailey, M.D., Detroit; L. A. Campbell, M.D., Saginaw; G. C. Chostner, M.D., Daytona Beach, Fla. (Wayne County); F. J. Eakins, M.D., Berkely; Geron Fredrickson, M.D., Iron Mountain; John Heneveld, M.D., Muskegon; R. B. Kennedy, M.D., Detroit; F. O. Paull, M.D., Marquette; R. A. Pinkham, M.D., Lansing; F. L. Rector, M.D., Evanston, Ill. (Ingham County); W. H. Stadle, M.D., Battle Creek; and C. F. Thomas, M.D., Port Huron.
   (c) Ten members to Associate Membership: P. N. Agone, M.D., Detroit; W. I. Bauer, M.D., East Lansing (Washtenaw County); C. A. Cetlinski, M.D., Hamtramck; G. D. Culver, M.D., Stockbridge; I. J. Kurtz, M.D., Detroit; H. N. Manz, M.D., Detroit; Robert Michmerhuizen, M.D., Grand Haven; Leland Sargent, M.D., Jackson; D. W. Schiff, M.D., Belcourt, N.D. (Wayne County); and F. D. Scruton, M.D., Detroit.
9. Elected the following Officers:
   (a) J. T. P. Wickcliffe, M.D., Calumet, as Councilor of the 13th District (1958).
   (b) B. M. Harris, M.D., Ypsilanti, as Councilor of the 14th District (1959).
   (c) William Bromme, M.D., Detroit, as Councilor of the 18th District (1959).
   (d) W. D. Barrett, M.D., Detroit (1956); W. H. Huron, M.D., Iron Mountain (1956); and R. L. Novy, M.D., Detroit (1956), as Delegates to the American Medical Association.
   (e) G. W. Slagle, M.D., Battle Creek (1956); C. I. Owen, M.D., Detroit (1956); and J. R. Rodger, M.D., Bellaire (1956), as Alternate Delegates to the American Medical Association.
   (f) W. S. Jones, M.D., Menominee, as President-Elect.
   (g) J. E. Livesay, M.D., Flint, as Speaker, House of Delegates.
   (h) K. H. Johnson, M.D., Lansing, as Vice Speaker, House of Delegates.

Michigan State Medical Society

Eighty-ninth Annual Session

DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES

MONDAY MORNING SESSION

September 27, 1954

The 89th annual meeting of the House of Delegates of the Michigan State Medical Society, held at the Sheraton-Cadillac Hotel, Detroit, September 27-28, 1954, convened at 10:15 a.m., J. E. Livesay, M.D., Speaker of the House, presiding.

I. RECORD OF ATTENDANCE

Office	*Officer*	*Meetings* 1st	2nd	3rd	4th	5th
Speaker	J. E. Livesay, M.D.	x	x	x	x	x
Vice Speaker	K. H. Johnson, M.D.	x	x	x	x	x
Secretary	L. Fernald Foster, M.D.	x	x	x	x	x
Immediate Past President	R. J. Hubbel, M.D.	x	x	x	x	–
County	*Delegate*					
1. Allegan	L. F. Brown, M.D.	x	x	x	x	x
2. Alpena-Alcona-Presque Isle	E. S. Parmenter, M.D.	x	x	x	x	x
3. Barry	A. B. Gwinn, M.D.	x	x	x	x	x
4. Bay-Arenac-Iosco	O. J. Johnson, M.D.	x	x	x	x	x
	W. S. Stinson, M.D.	x	x	x	x	x
5. Berrien	D. W. Thorup, M.D.	x	x	x	x	x
	J. C. Elliott, M.D.	x	x	x	x	x
6. Branch	H. J. Meier, M.D.	x	x	x	x	–
7. Calhoun	H. C. Hansen, M.D.	x	x	x	x	x
	S. T. Lowe, M.D.	x	x	x	x	x
8. Cass	S. L. Loupee, M.D.	x	x	x	x	x
9. Chippewa-Mackinac	W. F. Mertaugh, M.D.	x	x	x	x	x
10. Clinton	F. W. Smith, M.D.	x	x	x	x	x
11. Delta-Schoolcraft	J. H. Fyvie, M.D.	x	x	x	x	x
12. Dickinson-Iron	W. H. Huron, M.D.	x	x	x	x	x
13. Eaton	P. H. Engle, M.D.	x	x	x	x	x
14. Genesee	C. W. Colwell, M.D.	x	x	x	x	x
	L. M. Bogart, M.D.	x	x	x	x	x
	R. M. Bradley, M.D.	x	x	x	x	x
	F. D. Johnson, M.D.	x	x	x	x	x
	F. W. Baske, M.D.	x	x	x	x	x
15. Gogebic	D. C. Eisele, M.D.		Not	Represented		
16. Grand Traverse-Leelanau-Benzie	D. G. Pike, M.D.	x	x	x	x	x
17. Gratiot-Isabella-Clare	M. G. Becker, M.D.	x	x	x	x	x
18. Hillsdale	A. W. Strom, M.D.	x	x	x	x	x
19. Houghton-Baraga-Keweenaw	J. T. P. Wickliffe, M.D.	x	x	x	x	x
20. Huron	C. W. Oakes, M.D.	x	x	x	x	x
21. Ingham	F. L. Troost, M.D.	x	x	x	x	x
	O. B. McGillicuddy, M.D.	x	x	x	x	x
	J. M. Wellman, M.D.	x	x	x	x	x
22. Ionia-Montcalm	W. L. Bird, M.D.	x	x	x	x	x
23. Jackson	N. D. Munro, M.D.	x	x	–	x	x
24. Kalamazoo	W. A. Wickham, M.D.	x	x	x	x	x
	W. A. Scott, M.D.	x	x	x	x	x
	I. W. Brown, M.D.	x	x	x	x	x
	F. C. Ryan, M.D.	x	x	x	x	x
25. Kent	A. V. Wenger, M.D.	x	x	x	x	x
	W. J. Fuller, M.D.	x	x	x	x	x
	L. C. Carpenter, Jr., M.D.	x	x	x	x	x
	W. C. Beets, M.D.	x	x	x	x	x
	G. W. DeBoer, M.D.	x	x	x	x	x
	R. A. Rasmussen, M.D.	x	x	x	x	x
	K. E. Fellows, M.D.	x	x	x	x	x
26. Lapeer	D. J. O'Brien, M.D.	x	x	x	x	x
27. Lenawee	George Wilson, M.D.	x	x	x	x	–
28. Livingston	H. C. Hill, M.D.	x	x	x	x	x
29. Luce	T. W. Thompson, M.D.		Not	Represented		
30. Macomb	Sydney Scher, M.D.	x	x	x	x	x
31. Manistee	E. A. Oakes, M.D.	x	x	x	x	x
32. Marquette-Alger	A. S. Narotzky, M.D.	x	x	x	x	x
33. Mason	H. G. Bacon, Jr., M.D.	x	x	x	x	x
34. Mecosta-Osceola-Lake	Paul Ivkovich, M.D.	x	x	x	x	x
35. Menominee	J. R. Heidenreich, M.D.	x	x	x	x	x
36. Midland	M. J. Ittner, M.D.	x	x	x	x	–
37. Monroe	T. A. McDonald, M.D.	x	x	x	x	–
38. Muskegon	R. D. Risk, M.D.	x	x	x	x	–
	N. W. Scholle, M.D.	x	x	x	x	–
39. Newaygo	J. P. Klein, M.D.	x	x	x	x	–
40. North Central	L. F. Hayes, M.D.	x	x	x	x	x
41. Northern Michigan	J. R. Rodger, M.D.	x	x	x	x	x
42. Oakland	J. M. Markley, M.D.	x	x	x	x	x
	Otto O. Beck, M.D.	x	x	x	x	x
	P. E. Sutton, M.D.	x	x	x	x	x
	H. A. Furlong, M.D.	x	x	x	x	–
	E. B. Cudney, M.D.	x	x	x	x	x
43. Oceana	W. G. Robinson, M.D.		Not	Represented		
44. Ontonagon	W. F. Strong, M.D.		Not	Represented		
45. Ottawa	Otto VanderVelde, M.D.	x	x	x	x	–
46. Saginaw	J. P. Markey, M.D.	x	x	x	x	x
	M. F. Bruton, M.D.	x	x	x	x	–
	A. C. Stander, M.D.	x	x	x	x	x
47. Sanilac	R. J. Winfield, M.D.	x	x	x	x	x
48. Shiawassee	C. L. Weston, M.D.	x	x	x	x	x
49. St. Clair	J. F. Beer, M.D.	x	x	x	x	x
50. St. Joseph	S. A. Fiegel, M.D.	x	x	x	x	x
51. Tuscola	L. L. Savage, M.D.	x	x	x	x	x
52. Van Buren	W. R. Young, M.D.	x	x	x	x	x
53. Washtenaw	P. S. Barker, M.D.	x	x	x	x	x
	H. F. Falls, M.D.	x	x	x	x	x
	O. K. Engelke, M.D.	x	x	x	x	x
	R. W. Teed, M.D.	x	x	x	x	x
	V. M. Zerbi, M.D.	x	x	x	x	x
54. Wayne	E. H. Fenton, M.D.	x	x	x	x	x
	M. A. Darling, M.D.	x	x	x	x	x
	M. L. Lichter, M.D.	x	x	x	–	–
	J. J. Lightbody, M.D.	x	x	x	x	x
	R. L. Novy, M.D.	x	x	x	x	–
	R. F. Fenton, M.D.	x	x	x	x	x
	E. A. Osius, M.D.	x	x	x	x	x
	G. C. Penberthy, M.D.	x	x	x	x	x
	W. S. Reveno, M.D.	x	x	–	–	–
	D. I. Sugar, M.D.	x	x	x	x	–
	G. S. Bates, M.D.	x	x	x	x	x
	E. C. Texter, M.D.	x	x	x	x	x
	J. G. Molner, M.D.	x	x	x	x	–
	C. I. Owen, M.D.	x	x	x	x	x
	E. G. Krieg, M.D.	x	x	x	x	x
	C. L. Candler, M.D.	x	x	x	x	x
	E. A. Bicknell, M.D.	x	x	x	x	–
	W. W. Babcock, M.D.	x	x	x	x	x
	J. B. Blodgett, M.D.	x	x	x	x	x
	R. A. Johnson, M.D.	x	x	x	x	x
	W. L. Brosius, M.D.	x	x	x	x	x
	G. T. McKean, M.D.	x	x	x	x	x
	H. F. Dibble, M.D.	x	x	x	x	x
	A. E. Price, M.D.	x	x	x	x	x
	P. C. Gittins, M.D.	x	x	x	–	x
	J. H. Schlemer, M.D.	x	x	x	x	x
	C. E. Umphrey, M.D.	x	x	x	x	x
	L. S. Fallis, M.D.	x	x	–	x	–
	E. D. King, M.D.	x	x	x	x	x
	C. K. Hasley, M.D.	x	x	x	x	x
	A. H. Price, M.D.	x	x	x	x	x
	L. J. Bailey, M.D.	x	x	x	x	–
	J. E. Croushore, M.D.	x	x	x	x	–
	Saul Rosenzweig, M.D.	x	–	x	x	x
	D. A. Young, M.D.	x	x	x	x	–
	J. E. Hauser, M.D.	x	–	x	x	x
	C. W. Sellers, M.D.	x	x	x	x	x
	F. P. Rhoades, M.D.	x	x	x	x	x
	Sidney Adler, M.D.	x	x	–	x	–
	I. D. Fryfogle, M.D.	–	x	x	x	x
	L. T. Henderson, M.D.	x	x	x	x	x
	Raphael Altman, M.D.	x	–	x	x	–
	Louis Jaffe, M.D.	x	x	x	x	x
	S. E. Gould, M.D.	x	–	–	–	–
	R. V. Walker, M.D.	x	x	x	x	x
	E. C. Long, M.D.	x	x	x	x	x
	Karl L. Swift, M.D.	–	x	x	x	x
	W. L. Foster, M.D.	x	x	x	–	x
55. Wexford-Missaukee	R. V. Daugharty, M.D.	x	x	x	x	–

IN MEMORIAM

THE SPEAKER: Every year at this time we announce the names of former members of this House who have passed on. I will also announce the passing of sixty-seven members of the Michigan State Medical Society since we last met. Former delegates and alternates were:

Delta-Schoolcraft County—Nathan J. Frenn, M.D.
Muskegon County—Roy Herbert Holmes, M.D., and Henry J. Pyle, M.D.
Lenawee County—Esli T. Morden, M.D.
Wayne County—Benjamin Priborsky, M.D.; Frank C. Witter, M.D.; Edward D. Spalding, M.D.; Donald C. Beaver, M.D.

May we rise, please, and have a moment of silence.

II. SPEAKER'S ADDRESS

By J. E. Livesay, M.D., Flint

Each year at this time it is the prerogative of the Speaker to address the House on some problem of medicine. My immediate predecessor did not avail himself of this opportunity, but left the heavy discussion to the officers of the Society whose talks were to follow. I am going to follow this precedent. The only discussion I have to offer is a few thoughts on the question of unity.

I assume that you all know that the House of Delegates is the constituted legislative branch of the Michigan State Medical Society; that the Council and its Executive Committee act in your behalf during the year, but each fall their work is laid before you for approval, disapproval or modification. The Council cannot set aside the policies you make here. Your decisions will influence the professional lives of doctors in every corner of the State. That is why it is I suggest to this body that we give some thought to a unity of purpose in what we do.

As doctors we can be divided into all sorts of specialty groups—surgeons, urologists, pathologists, pediatricians, general practitioners, and so on. Each group has specific problems of its own, depending on the nature of the practice involved. I trust that we as delegates will divest ourselves of special interests, and will try to see the other fellow's problems as well as our own in the light of what is best for the whole of medicine in Michigan.

There is another division of doctors that we have inherited from the nature of the population density in this State. I refer to the irritating designation of "out-state" and "Wayne County." I have heard this every year I have been in the House. In fact, one year I heard via the grapevine of a move to hold an "out-state caucus" as opposed to the "Wayne caucus." I hope this year we do not hear of this designation, and in the years ahead abolish it from our thinking.

It can be argued correctly that areas of large population create special problems in the practice of medicine. But let us not forget that areas of sparse population also create another set of special problems. The problems of both groups become the problems of all of us in the House of Delegates. We should never attempt to pit one group and its problems against the other, but rather to pool our problems here and solve them together. That is the democratic way of the Michigan State Medical Society.

A third division is city practice versus country practice. It is easy for us, after a decade or more of practice, to begin to feel that the practice of good medicine is the exclusive property of the group with which we work, or the hospital in which we practice, and perhaps become quite content with things as they are.

This summer two prominent persons were stricken in remote vacation villages with sudden surgical emergencies. I am happy to say that each case received the best of medical care, and both recovered. These cases dramatized to me the fact that good medical care is to be had throughout Michigan, both in our big cities and cities even far removed from our areas of dense population. More important, this emphasized to me that it is our job to see to it that the best of medical care is available from the most remote hamlet of the Keweenaw Peninsula to the caverns of Detroit's skyscrapers. It seems to me this is really our prime objective as a Medical Society. I hope we can constantly remind ourselves of it as we go over the work of the past year and as we consider matters of future policy.

As the 89th annual session of the House of Delegates begins, I hope we can forget the specialty of medicine we practice, and the name of the town we come from, long enough to view the whole of medical practice in the State of Michigan in the unselfish light of what is best for the patients who are served by the members of the Michigan State Medical Society in all the cities and crossroads of the State.

* * *

THE SPEAKER: This report will be referred to the Reference Committee on Officers' Reports.

III. PRESIDENT'S ADDRESS

By L. W. Hull, M.D., Detroit

This is the valedictory or, it might be said, the swan song of your retiring President. It is his privilege to present to this House of Delegates some of his ideas gained through the years spent as a Councilor, President-elect and President of a great organization, the Michigan State Medical Society; so, I have a few things that I wish to say.

A careful and thorough reading of the Council and committee reports in the Handbook of Delegates is recommended so that you can keep abreast of the progress being made toward better medical care for the citizens of our State. It also will show you the immense amount of work done by your Council and committees during the year.

It seems as though there is room for more unity in our profession. Constructive criticism, honest differences of opinion, are always welcomed by elected representatives, and make for progress. Society moves forward in an environment of constant change, and we, as practitioners of medicine, must move with it. But let the critic study his problem and try to visualize the end results of what he proposes. Let us not be too prone to criticize experiments on a private enterprise basis in the practice of medicine.

There has been too little attention paid to what is called the orientation of the medical student and the young doctor of medicine as to the traditions and ethics of the profession. It seems to me that the indoctrination of our younger group, as to their attitude toward the ideals of the practice of medicine, should be done on a local basis, perhaps in the Councilor districts. They should be taught that they are dedicated to a life of service, and that there are some things a doctor of medicine does not do.

Our fight against the socializers, the do-gooders and those fuzzy-minded individuals who embrace the teachings of Karl Marx still goes on in the State and Nation. The infections of socialism and communism are still abroad in our land. Attempts will be made in the next national Congress by the Bureau of Health, Education and Welfare to put the doctors of medicine, by edict, in Social Security and to re-insure all health insurance policies, both voluntary and commercial.

The Veterans Administration continues to offer so-called free medical care to ever-increasing numbers of war veterans, without regard to the cause of the disability. The members of the medical profession will soon be offered a chance to become government contract doctors in the certification of so-called permanently and totally disabled workers. The disabled workers and par-

ticipating doctors of medicine will be subject to the rules and regulations of the Bureau of Health, Education and Welfare. Payment to the doctors who are willing to participate will be made from the so-called Social Security "trust fund," an 18 billion dollar debit on which we are now paying interest through our taxes.

Let us beware of the efforts being made to bring socialized medicine into our country (as has been said) through the back door.

However, we as practitioners of medicine must realize that the sick are not simply our concern, but that of their families, the community and the government. Our job is to guide any social change taking place in our country toward bettering the personal and general welfare and health of our people, and also to present to the public the facts upon which we try to base our actions for their consideration and judgment.

Medical practice is both scientific and toward a social end. In spite of much talk in the country to the contrary, it is still my belief that no one can be a better judge of the practice of medicine than the man who practices it—the medical doctor. Let us not forget that the lay public holds the medical profession responsible for looking after the public's medical interests.

What do we mean by the term, "freedom of medicine"? To me it means the freedom of the citizen to choose his own doctor, and the freedom of the doctor to work out his own salvation according to the principles and precepts of the Hippocratic Oath, without outside or governmental interference.

I leave office with the knowledge that the activities of the Society will be in good hands—those of Dr. Robert Baker. I am thankful to you for the opportunity you gave me to be of service to the cause of medicine. Also, I am thankful to you for the opportunity to be closely associated with such a fine group of men as compose our Michigan State Medical Society Council, its committees, and headquarters staff.

It has been a wonderful experience. I thank you.

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THE SPEAKER: The President's address will be referred to the Reference Committee on Officers' Reports.

IV. PRESIDENT-ELECT'S ADDRESS

By R. H. Baker, M.D., Pontiac

Last year the House of Delegates extended to me the honor of representing our Society as President-elect. I accepted with a feeling of pride that I should have been so selected. Now, having completed my probationary year, I look forward to the next year with deep humility. I believe I now know what every President-elect before me must have felt on the eve of his assuming the responsibilities as President of this great and progressive Society. I shall make every effort to measure up to the job.

The medical profession of Michigan has had many "firsts" in our constructive organization. Sometimes it seems that our membership is not fully aware of the success that has been ours in a well-coordinated Society. Perhaps we have advanced too fast for some of our less active members to keep pace.

Within my professional memory so many changes have taken place in the organization and activities of the State Medical Society that, had I not taken an active interest, I might have fallen into the same category as some of our most critical members. I believe that most of the fault-finding we occasionally hear comes mostly from those men who simply pay dues grudgingly, but who take no active part in their local or State Society. They feel an obligation to belong, but make no constructive effort to guide our policies. They even refuse to assume responsibilities of office or committee membership, but instead find fault with those who do.

At this time I am determined to direct my energies toward a better grass roots understanding of what our Society stands for, why it is following certain policies, and why our extensive public relations activities. If we can't arouse the interest of our inactive membership to attend meetings, I propose to do everything possible to reach them through our Councilors and by visits to county meetings by our elected officers. This may apply particularly to the more remote counties.

This coming year, I trust, will see our Society continuing its efforts toward elimination of unethical practice and reducing to a minimum the sort of behavior that has made our Grievance Committees necessary.

I thank you again for the honor you have extended to me, and I trust I may merit your confidence.

* * *

THE SPEAKER: Dr. Baker's address will be referred to the Reference Committee on Officers' Reports.

V. REPORTS OF THE COUNCIL

William Bromme, M.D., Chairman

I would like to preface the report of The Council by a few statements of fact. The first is that the activities of the State Society are regulated by the committee work of some fifty-odd committees of the State Society or The Council of the State Society. The membership of those committees totals over 600 doctors of medicine, many of whom are in this House of Delegates.

The Council serves as the functioning organization for the State Society in the absence of meetings of the House of Delegates. The Executive Committee serves as the functioning organization for The Council and for the House of Delegates in the absence of meetings of those organizations. Under those circumstances no action can be carried out by either The Council or the Executive Committee which is contrary to the expressed statement of policy of the House of Delegates.

The annual report of The Council is printed in the Handbook for Delegates on page 53. We wish to present the following supplemental report of The Council as of September 26, 1954:

1. *Membership.*—As of September 1, 1954, the membership of the Michigan State Medical Society totaled 5,670, including 593 Special members who are relieved from paying dues and assessments. This compares favorably with the total of 5,414 at the same time last year.

2. *Finances.*—The Constitution of the Michigan State Medical Society places responsibility on The Council for administration of the funds of the Society, and charges the Treasurer with safekeeping of the Society's invested funds.

Following the provision of the MSMS Constitution, The Council has caused an "annual audit to be made of the funds of the Society by a certified public accountant." The report was made by Madan & Bailey for the year 1953. As in the past, the audit of the accounts is and always has been available for inspection by any member of the Michigan State Medical Society who may call at the Executive Offices, 606 Townsend Street, Lansing.

The report of our staff accountant for the first eight months of this year (from January 1 to September 1, 1954) of income and expenses is as shown in the accompanying report.

More detailed financial reports, including the public relations accounts from January 1 to September 1, 1954, are mimeographed and available to all members of the House of Delegates. Also included is report from Treasurer William A. Hyland, M.D., presented to The Council in July, 1954.

3. *Michigan Medical Service.*—An up-to-date report on this Corporation, including its finances, will be presented to you at the meeting of Michigan Medical Service membership tomorrow, September 28, at 2 p.m., in the new headquarters building of Blue Cross-Blue Shield,

FINANCIAL REPORT FOR PERIOD TO SEPTEMBER 1 1954

Account	On hand 1/1/54	Income to 9/1/54	Expenses to 9/1/54	Balance on Hand 9/1/54
General Fund	$ 72,893.41	$104,010.47	$ 75,742.32	$101,161.56
Annual Session	.....	22,600.00	4,102.77	18,497.23
Michigan Clinical Institute	.....	12,460.00	11,790.78	669.22
The Journal	.....	54,325.82	45,135.44	9,190.38
Public Education	59,887.04	45,382.50	16,741.60	88,527.94
Public Service	.....	22,600.13	13,031.71	9,568.42
Professional Relations	.....	32,644.62	19,078.27	13,566.35
Public Education Reserve	30,000.00	.....	.....	30,000.00
Rheumatic Fever Control	9,571.69	17,512.50	15,174.87	11,909.32
Surplus from Dues	21,729.67	7,546.99	.....	29,276.66
Building Fund	13,002.15	10,062.50	6,330.11	16,734.54
Beaumont Memorial Fund*	9,742.16	3,382.00	8,119.69	14,479.85
Totals	$197,341.80	$332,527.53	$215,247.56	$314,621.77

*Amount on hand January 1, 1954, and balance on hand September 1, 1954, are credits.

441 East Jefferson Avenue, Detroit. All MSMS delegates are members of the Michigan Medical Service Corporaton and are expected to attend this important annual meeting.

4. *Beaumont Memorial.*—Otto O. Beck, M.D., Birmingham, Chairman of the Beaumont Memorial Committee, presented to The Council the following financial status of the Beaumont Memorial:

Donated to September 1,1954	$34,866.67
Expended to September 1,1954	49,346.52
Advanced by MSMS	14,479.85

The Beaumont Memorial is one of the finest public relations projects ever undertaken by the medical profession of Michigan. The development of this memorial to Dr. William Beaumont, at the site where his great and original contribution to medicine was accomplished, will be a perpetual reminder to the people of the solid contributions made by Michigan doctors of medicine in their behalf. The Council invites additional donations to the Fund so that the expenses of the building and furnishing the Memorial may be fully liquidated through voluntary means.

5. *Michigan's Foremost Family Physician for 1954.*—Selection of one of our Michigan general practitioners as nominee for the AMA Gold Medal Award is now the privilege of the House of Delegates. According to the satisfactory procedure worked out two years ago, the field of nominees has been narrowed to three from which the House of Delegates is invited to elect one. The three names are: Charles J. Bloom, M.D., Muskegon; Duncan J. McColl, M.D., Port Huron, and Joseph H. Sherk, M.D., Midland.

6. *List of Non-members.*—Pursuant to the House of Delegates instruction of 1948. The Council (through Secretary L. Fernald Foster, M.D.) today submits a list of former members whose 1954 MSMS dues were not paid as of September 1, 1954. To insure accuracy, this list recently was submitted to and certified as correct by our component county and district medical society secretaries.

7. *Salk Polio Vaccine.*—This situation was reported to the membership of MSMS in The Journal of the Michigan State Medical Society. A number of problems were raised when the National Foundation for Infantile Paralysis announced that it was preparing to inoculate up to 100,000 youngsters in Michigan with an experimental vaccine composed of killed poliomyelitis virus. At the request of one of our members, the Executive Committee went deeply into the project, and with the assistance of our State Commissioner of Health the many problems were resolved into three basic questions for which we must express our appreciation to Dr. Heustis in their phrasing.

The first basic question was this: Is this vaccine safe? At the onset of our studies we had nothing but the cognizance of the discoverer of the vaccine to rely on. In time, and almost on the eve of the start of the field trial in Michigan, the National Foundation formed a committee to survey the protocol of manufacture by the commercial houses designated by it to produce the material in bulk; but in the interim there was nothing but the experience of the inventor in a limited series, and with a changing type of vaccine, to guide your deputies or the State Health Commissioner toward an answer to this question.

The second question was this: Is this vaccine potent? Again we had nothing but the assurance of the inventor of the vaccine that his preparation in series far smaller than that contemplated for the children of Michigan was capable of producing an elevated antibody titre. In fact, the few published papers by the inventor of the vaccine bear record of the weakness of the immunizing agent. They describe techniques to concentrate this antigen by using mineral oil and other agents. It is to be noted that the actual process leading to the production of the vaccine used in Michigan is not at this considerably later date to be found in published form in any established scientific publication. The National Foundation for Infantile Paralysis set up its bold and large-scale field test in order to prove or disprove the potency of the vaccine whose experimental development it had subsidized; and this in itself is a curious variation from the orderly and slow—painstakingly slow—research process which has brought the advances of modern medicine to their unequivocal state.

The third question involved responsibility: Who accepts the responsibility for any untoward events which occur during this field trial? The National Foundation ultimately indicated that it had provided itself with a large public liability policy, but did not want broad publicization of the fact. The terms of this policy were never submitted to a legal agent of this Commonwealth for inspection, and there is considerable question if money had the power to compensate for damage.

The Executive Committee, as your deputy, has responsibility in the field of the health problems of the people of Michigan, but they also have a responsibility to you, who are our fellow doctors of medicine. We have no mandate to obligate you in a project in which you have been a bystander without voice or individual decision. We have no mandate to obligate the parents of your patients to a nation-wide experiments carried out by a private organization which is not a branch of government. At the same time we have no reason to deny to any child possible protection, however short-lived, against epidemic poliomyelitis. The Executive Committee was in unanimous agreement. It utilized the informational media of this day to indicate to those who would hear that "The MSMS will not withhold approval from the experiment on children by mass inoculation of the Salk poliomyelitis vaccine as proposed by the National Foundation for Infantile Paralysis, and we will defer to the decision of the State Health Commissioner."

Since that statement, the mass experiment has been conducted in Michigan. No one knows, or will know until 1955, that there has been protection against epidemic poliomyelitis by virtue of the inoculations, or that there has been significant increase in antibody titre in the blood of those inoculated, whether this increase is to the level of producing immunity or not. No one has indicated to anyone whether this patient of yours received the vaccine or the control, and it is impossible to state that the proprietary vaccine of the National Foundation, in reaching the mass market first, has made a significant contribution to the mass control of epidemics.

By direction of The Council in its meeting last night, I must indicate to this House that this statement carried one dissenting vote in the meeting of The Council last night. That vote was by the Councilor from the Second District, Doctor Breakey.

8. *MSMS Health and Accident Insurance Program.*—The report to September 15, 1954, of this program, sup-

plied by the carrier, Provident Life and Accident Insurance Company of Chattanooga, Tennessee, is as follows:

As of September 15, 1954, Provident has collected a total in premiums of $174,236.72.
As of September 15, of that total we have earned in premiums $141,914.57.
From the inception through September 15, 1954, we have actually paid in claims $39,741.55.
We are carrying as reserves for liability which originated prior to September 15 a total of $41,838.24.
This makes our total of claims paid and reserves for future payments $81,579.79.
The percentage of claims paid and pending to premiums earned is thus 47.59 per cent.

If the business had been in force for several years this would, of course, be an excellent loss ratio. However, over the years we have found that we do not come to a true experience, that is, a true loss ratio, on a professional group case until it has been in force for two or three years. If our experience is a proper guide post, I think it is fair to say that the loss ratio will show a considerable rise over this figure of 47.50 per cent before it levels off.

At the express request of The Council, a representative of Provident is here, to be available to the delegates and the reference committees to impart information and to answer any questions concerning our health and accident insurance protection. I wish to introduce Mr. W. C. Hershey, of Provident.

The Council's Committee on Health and Accident Insurance Policy Control, created to maintain harmonious relations between MSMS and the insurance carrier, is NOT an arbitration board to settle disputed claims.

9. *Council Committee Reports.*—

(a) Supplemental Report of Emergency Medical Service Committee:

During the past year the Committee met on four occasions, twice in Lansing and twice in Detroit. The major effort of the Committee was directed toward the development of a medical activator program designed to stimulate medical civil defense throughout the State. The program had been submitted to The Council and was approved.

This activity is considered of such importance by the Committee that a brief description is in order. It was felt that in the event of major disaster of any type, occurring anywhere in the State, of necessity the entire medical potential would need to be mobilized. This was considered especially valid because anything occurring in one part of the State would affect the morale as well as the economic responsibilities of the remainder of the State.

Doctors of medicine have always assumed a leading role in creating awareness of community problems. Hence, the State was divided into the Councilor Districts, and each Councilor was requested to appoint one or more physicians to act as a medical activator in his area. These men were to work through their county medical societies in obtaining the appointment and activation of a local emergency medical service committee. The chairman of this committee was to encourage the local civil defense director to appoint and activate a medical advisory committee. The MSMS Emergency Medical Service Committee was to encourage the State Office of Civil Defense to work through its channels so that the county and local civil defense directors would be aware of the activity of organized medicine throughout the State.

Three meetings have been held by the MSMS Committee with the group of medical activators. At these meetings the program was carefully outlined and the mission of each physician was detailed. During the course of the several meetings the activators had an opportunity to examine the medical plan proposed by the State Office of Civil Defense, and offering their opinion to the MSMS Committee. In addition, all material developed by the Wayne County Medical Society and the Detroit Office of Civil Defense was made available. Members of the Wayne County Medical Society and of the Detroit Office of Civil Defense were on hand to relate their experiences and the mechanics of implementing a medical civil defense plan.

During the year members of the Committee met with representatives of the Michigan Office of Civil Defense for the purpose of developing a medical plan which would meet the requirements of the Michigan State Medical Society. The Committee is happy to report such a plan was finally evolved which was recommended to The Council for approval.

The Committee was informed by a representative of the Michigan Office of Civil Defense that that Office regarded the Emergency Medical Service Committee of the Michigan State Medical Society as its technical medical advisory group.

The following recommendations for future consideration of the Committee are suggested:

(1) The medical activators program should be continued in the present direction.

(2) Every member of the Michigan State Medical Society should be made aware of his responsibility in the event of large-scale disaster of any type, recognizing that it is to the medical profession that our citizens look in time of great stress.

(3) The present excellent co-operation with the Michigan Office of Civil Defense should be continued.

(b) *Periodic Health Appraisal Committee:* The program of information to the medical profession of Michigan on periodic health appraisal, adopted by this Committee as its worthy project for the ensuing year, is heartily endorsed by The Council. Every member of the MSMS House of Delegates, as a chosen leader of organized medicine in his area, is earnestly urged by The Council to forward among his patients the program of periodic health appraisal, as outlined by this active Committee which represents both MSMS and the Michigan Health Council. The periodic health appraisal campaign will begin in October with a general mailing to all MSMS members; further additional efforts seeking M.D. co-operation will be contained in the Secretary's Letter in The Journal, and through available media utilized by our Public Relations Department.

The people want periodic health appraisal—and only the medical profession can render this service adequately. Every practitioner of medicine must recommend to his patients the value of periodic health appraisal, and must make it part of his armamentarium in daily use, otherwise this opportunity to bring greater life-saving service to the people will become a public (socialized) function.

A recommendation on this subject follows.

10. *Innovation at 1954 Annual Session.*—Following the Secretary's recommendation, approved by The Council last January, ALL doctors of medicine who entered practice in Michigan since the last MSMS Annual Session were sent special invitations to attend the 1954 Annual Session. In this list of approximately 400, nonmembers as well as members were included. The Annual Session will indicate to the nonmembers some of the many values of association with MSMS.

11. *The MSMS Public Relations Manual, "Winning Friends for Medicine,"* which is a compendium of outlines of twenty-six public relations projects which can be carried out by county medical societies, has been supplied to all component county and district medical society presidents and secretaries. It is obvious that all county societies cannot carry on all the programs outlined under the three basic categories in the brochure, namely: (a) improvement of medical practice; (b) education of the public with respect to health and medical practices; and, (c) organization for action to maintain medical freedom.

However, the Public Relations Committee has invited

every county medical society to select from the twenty-six projects those which can be carried out with greatest value in that particular county medical society. It has further suggested that at least one project from each of the three categories be included in all county society selections. Those county societies which have carried out these suggestions have found their programs valuable to them and their members, and have received help from the Michigan State Medical Society. However, many county medical societies have not as yet selected from the brochure the projects they desire to carry out.

A recommendation on this subject follows.

12. *Standards of Membership.* Upon the recommendation of our legal counsel, Mr. J. Joseph Herbert, a committee of The Council recently was appointed (composed of three Past Presidents) to survey the MSMS Bylaws concerning the standards of membership and the disciplining of members. By this time next year the committee undoubtedly will complete its study and, through The Council, will present to the House of Delegates recommendations for correcting present inconsistencies.

13. *Resolution re Complex Reports of Michigan Social Welfare Department.*—This action of the 1953 MSMS House of Delegates was invited to the attention of the Michigan Social Welfare Commission, which recommended that MSMS appoint a committee to work with the Commission's Medical Advisory Committee toward finding a solution to the problem. The MSMS Committee is composed of: W. B. Harm, M.D., Detroit, *Chairman;* O. J. Johnson, M.D., Bay City, and C. A. Paukstis, M.D., Ludington.

Recommendations

We respectfully invite to your attention the four recommendations in the original Annual Report of The Council, printed in the Handbook on page 78. They read as follows:

1. That all members of the Michigan State Medical Society be urged by the House of Delegates to give conscientious attention to proper utilization of Blue Cross-Blue Shield services to the end that these voluntary facilities remain solvent and helpful to our patients; that all members carefully study the brochure to be released by MSMS through its Advisory Committee to Michigan Hospital Service after its approval by the House of Delegates. Our system of voluntary medical-hospital service will survive only with the strong support of every medical man.

2. That The Council be authorized to send MSMS representatives to Washington, D. C., in 1955, on the occasion of the Annual Michigan Day.

3. That contributions to the Beaumont Memorial Restoration Fund—by *every individual member* of the Michigan State Medical Society—be urgently recommended by the House of Delegates. Only 2,327 M.D.s (42.1 per cent of MSMS membership) have contributed to July 1, 1954. Everyone of the 5,530 members of the State Society should take pride in making a contribution, however small, to the Beaumont Memorial which represents the best type of public relations for the medical profession of this State.

4. That the House of Delegates give consideration to amending the Bylaws so that current special membership problems are solved.

The Council respectfully submits two additional recommendations:

5. That the House of Delegates endorse the concept of the periodic health appraisal, as developed by the Committee on Periodic Health Appraisal, and that the members of the House of Delegates individually pledge themselves to further zealously the periodic health appraisal program, to the end that private medical practice will bring, in full measure to all people, the modern health protections afforded by medical science.

6. That the House of Delegates urge each component county and district medical society to review the MSMS Public Relations Manual, "Winning Friends for Medicine," and to select from it those projects most likely to advance the public relations of the medical profession in the area, in order that the State-wide effort for better public relations will be most effectively advanced. The county medical societies are invited also to use the services of the Public Relations counsel and field secretaries in the promotion of these projects.

Respectfully submitted,

The Council, MSMS
William Bromme, M.D., *Chairman*
H. B. Zemmer, M.D., *Vice Chairman*
Arch Walls, M.D.
R. S. Breakey, M.D.
G. W. Slagle, M.D.
Ralph W. Shook, M.D.
J. D. Miller, M.D.
H. H. Hiscock, M.D.
L. C. Harvie, M.D.
G. B. Saltonstall, M.D.
F. H. Drummond, M.D.
W. M. LeFevre, M.D.
B. T. Montgomery, M.D.
W. S. Jones, M.D.
B. M. Harris, M.D.
D. Bruce Wiley, M.D.
W. D. Barrett, M.D.
W. B. Harm, M.D.
J. E. Livesay, M.D., *Speaker*
K. H. Johnson, M.D., *Vice Speaker*
L. W. Hull, M.D., *President*
R. H. Baker, M.D., *President-elect*
L. Fernald Foster, M.D., *Secretary*
W. A. Hyland, M.D., *Treasurer*
R. J. Hubbell, M.D., *Immediate Past President*

The speaker: These reports of The Council will be referred to the Reference Committee on Reports of The Council, with two exceptions:

On page 77 and page 78 of the Handbook, and item 4 of the Supplemental Report dealing with recommended changes in the Bylaws, that section of the report will be referred to the Reference Committee on Constitution and Bylaws.

Item 7 of the Supplemental Report, because of the nature of the subject matter, namely, the Salk polio vaccine, will be referred to the Reference Committee on Hygiene and Public Health.

VI. REPORT OF DELEGATES TO AMA

By William A. Hyland, M.D.

The 103rd annual meeting of the House of Delegates of the American Medical Association in San Francisco continued the development of a realistic approach to all questions of a medical nature, with special emphasis upon the subjects of: (a) closed panel medical care plans; (b) division of fees; (c) osteopathy; (d) veterans' care; (e) medical education and hospitals, and (f) the medical training and acceptance of foreign medical school graduates.

Dr. Walter Martin of Virginia was inaugurated as President, with the honor of President-elect being bestowed upon Dr. Elmer Hess of Erie, Pennsylvania, who previously had been a member of the House of Delegates and Chairman of the Council on Medical Service. Our own Dr. Robert Novy of Detroit was unanimously chosen to fill Dr. Hess' unexpired term on this important Committee.

With the election of Bob Novy to the Council on Medical Service, the House demonstrated its wisdom in picking the most qualified members for places on the various important committees.

The quality of men you are sending to the American

Medical Association is such that the organization is keenly aware of the contribution that is being made by the Michigan group, through their work on the various more important reference committees, both standing and special, which resulted in all of the group being called upon for personal opinions on a goodly number of the more important procedures of the organization by its leaders. This high esteem is being jealously guarded by your delegates, who will ever strive to maintain this position.

The proceedings of the House of Delegates has been printed in *The Journal of the American Medical Association* and The Journal of the Michigan State Medical Society, but a summary of the more important features should be brought to your attention, with consideration of your indulgence and brevity in mind.

Closed Panel Medical Care Plans

The New York resolution, calling for several changes in the Principles of Medical Ethics relative to participation in closed panel medical care plans, was considered by the Reference Committee on Miscellaneous Business. That Committee made the following recommendation, which was adopted by the House:

"In the discussion before your Reference Committee on this resolution, it became apparent to the Committee that clarification and interpretation of the Principles of Medical Ethics in relation to prepaid medical care plans are desirable. As set forth in the Bylaws, the Judicial Council has jurisdiction on all questions of medical ethics.

"Therefore, your Reference Committee recommends that the House of Delegates request the Judicial Council to . . . investigate the relations of physicians to prepaid medical care plans, and render such interpretations of the Principles of Medical Ethics as the Council deems necessary, and report to the House of Delegates not later than the next annual meeting of the Association.

"The Committee further recommends that the New York resolution be referred to the Judicial Council for consideration in connection with this investigation."

The New York resolution, among other suggested changes, would add the following new paragraph to Chapter I, Section 4, "Advertising," of the Principles of Medical Ethics:

"It should be understood that any medical care plan, company, or organization which advertises for subscribers and directs such subscribers to a restricted panel of physicians for medical care, is advertising for the benefit of the physicians involved."

Division of Fees

The House adopted the report of the Reference Committee on Miscellaneous Business, which advocated acceptance of a Judicial Council report on the subject of billing, and made a further recommendation: "That the House of Delegates resolve that it firmly opposes fee splitting, rebating, or payment of commissions in any guise whatsoever and that it further opposes any mechanism that encourages this practice."

The Judicial Council report included the following statements:

"The Judicial Council is of the opinion that the only new facet concerning this subject that has come up recently is the case of joint billing to some of the nonprofit insurance companies. In many cases these insurance companies insist on a joint or combined bill but the bill is being paid in most instances by two checks. This is not considered unethical, and all insurance plans which do not pay the individual physician in this manner should be urged to do so.

"The Judicial Council is still of the opinion that when two or more physicians actually and in person render service to one patient, they should render separate bills.

"There are cases, however, where the patient may make a specific request to one of the physicians attending him that one bill be rendered for the entire services. Should this occur it is considered to be ethical if the physician from whom the bill is requested renders an itemized bill setting forth the services rendered by each physician and the fees charged. The amount of the fee charged should be paid directly to the individual physicians who rendered the services in question.

"Under no circumstances shall it be considered ethical for the physician to submit joint bills unless the patient specifically requests it, and unless the services were actually rendered by the physicians as set out in the bill."

Osteopathy and Medicine

Several resolutions dealing with osteopathic problems were considered. The House accepted a recommendation by the Reference Committee on Medical Education and Hospitals, and adopted a Supplementary Report of the Board of Trustees on a report of the Committee for the Study of Relations Between Osteopathy and Medicine:

"The justification or lack of justification of the 'cultist' appellation of modern osteopathic education could be settled with finality and to the satisfaction of most fair-minded individuals by direct on-campus observation and study of osteopathic schools. The Committee, therefore, proposed to the Conference Committee of the American Osteopathic Association that it obtain permission for the Committee for the Study of Relations between Osteopathy and Medicine to visit schools of osteopathy for this purpose.

"The Conference Committee favorably recommended this proposal to the Board of Trustees of the American Osteopathic Association, which considered it at a special meeting on February 6-7, 1954. It has referred the question to its House of Delegates, which will act upon the proposal in July, 1954. If the action of the House of Delegates of the American Osteopathic Association be favorable, the on-campus observations can be carried out in the fall of this year. The osteopathic group met in July and approved inspection by a representative group from the American Medical Association of their schools.

"The Committee therefore recommends:

"1. That no action be taken on the report at this time, and that final action be deferred until December, 1954.

"2. That the Committee be continued until December, 1954, in order to be available to evaluate education in schools of osteopathy should the House of Delegates of the American Osteopathic Association act favorably upon the recommendation of its Conference Committee."

We as delegates were authorized by the Michigan State Medical Society House of Delegates to support Klein's report; as it was postponed, we will report on it later.

Veterans Medical Care

Accepting a report by the Reference Committee on Legislation and Public Relations, the House adopted two strong resolutions condemning the present practice of established service connection for veterans' liabilities by legislative fiat. In recommending passage of both resolutions, the Committee said:

"The study of the chronological expansion by law and regulation, together with evidence presented of pending legislation now before a congressional committee, emphasize all too clearly the imperative need of decisive action on the part of the American Medical Association.

"It is the opinion of the Committee that the time is at hand when the American Medical Association and its component societies should go all-out in preventing this unscientific method of determination of service-connected disabilities, and that we respectfully request that copies of these resolutions be transmitted to the Congress of the United States and other appropriate federal agencies."

In connection with veterans' medical care, the House

also adopted recommendations by the Reference Committee on Insurance and Medical Service which reaffirmed the policy on non-service-connected disabilities, established at the 1953 annual meeting, and which commended the informational program carried out since then by the Committee on Federal Medical Services of the Council on Medical Service.

Contrary to some verbose but not too well thought-out statements, the American Medical Association has no quarrel with the veterans. On the contrary, a large part of our membership are members of the various veteran organizations, and are much more conversant with the problem than most of those who wish to have, in time, nearly 100,000,000 citizens of the United States placed under government medical care, most of which treatment has no relation to their service. In the words of Dr. Walter Martin, this attitude will bring socialization of medicine quicker than any other method. Continuing, he further states, these same people individually are openly opposed to socialization in any form.

Medical Education and Hospitals

Although there were many reports and resolutions dealing with the general subject of medical education and hospitals, few were controversial. These resolutions were concerned with the problems of hospital accreditation, interns, foreign graduates—many other related topics—specialization, nursing education, oral surgery, and so forth.

Hospital Accreditation.—The House of Delegates noted that although the Joint Commission for Accreditation of Hospitals has been in existence only a comparatively short time, its work has been outstanding. The House commended its efforts to improve hospital standards, and referred three resolutions to the Joint Commission:

1. The discontinuance of the registration of hospitals by the AMA Council on Medical Education and Hospitals. The House approved this recommendation and requested the Joint Commission to undertake this program.
2. A request for repeal of existing requirements concerning attendance at staff meetings. This resolution was referred to the Commission for such action as may be deemed appropriate.
3. Proposed changes in the rules re hospital staff appointments.

Internship.—On the basis of a report from the Special Committee to Study Internships, the House:

1. Reaffirmed its support of the Matching Plan. It was noted in Reference Committee that there not only were no objections to this Plan, but that remarks from the representatives of hospitals, schools, and students were all laudatory. It was emphasized that the program is voluntary and provides free choice for all persons or organizations involved. It was pointed out that under this program last year, 93 per cent of the interns were matched, 82 per cent with the hospital of their first choice.
2. Approved as a guide a new definition of an internship.
3. Noted that only 13.8 per cent of registered hospitals are approved for internship training, which may be a factor in failure to receive adequate numbers of interns.

Medical Training and Acceptance of Foreign Medical School Graduates

The Special Committee on Internships also called attention to the problem of the evaluation of the competency of foreign graduates. There was a report from the Board of Trustees and several resolutions on this subject.

It is pointed out that in the next two years' immigration quota, some 11,000 foreign medical school graduates will enter the United States, and that it is physically and financially impossible properly to evaluate the foreign school graduates. Instead, the Board of Trustees recommended that the applicants be screened individually by a central board, and that the American Medical Association take the initiative in the formation of such a commission. The House referred these reports and resolutions to the Council on Medical Education and Hospitals, with a request for a report at the Interim Session.

The Michigan delegates to the American Medical Association are conscious of their responsibility as your representatives to the parent organization, and are continuing the policy of being appreciated by our judicious advice and thorough evaluation of the many subjects that are presented at each session. Of the more than seventy resolutions presented, your group was thoroughly conversant with all of them.

Early each morning we met for breakfast, with a discussion of the more important questions by outstanding leaders or students of the particular subject on the agenda.

We devoted an unusual amount of time to the important closed panel item. All phases of this problem were presented by very conversant members of three different plans. The consensus of our group was that this subject is seemingly becoming closer to our own State, also that much is left desired in this phase of practice. However, we do advise careful scrutiny and ever-alertness to this problem in order to maintain a firm and definite hand in the handling of it.

I wish to express the deepest appreciation of the delegates and alternates for the help afforded by the officers, members of The Council and others of the Michigan State Medical Society who attended our daily State conferences, voicing their opinions and knowledge of the current subjects, thus aiding the delegates and alternates in their final opinions.

In turn, I wish to express my personal gratefulness to this same group, and compliment the delegates and alternates for the help and courtesy extended, and their untiring efforts, not for themselves but rather as representatives of the Michigan State Medical Society.

Finally, your delegates and the Chairman thank this House for the confidence you have displayed and the honor accorded us as your spokesmen. It is indeed a pleasure for all of us to serve you.

William A. Hyland, M.D., *Chairman*
Michigan Delegation to the American Medical Association House of Delegates
Wyman D. Barrett, M.D.
Robert L. Novy, M.D.
W. H. Huron, M.D.
Ralph A. Johnson, M.D.
Clarence I. Owen, M.D.
J. S. DeTar, M.D.
Grover C. Penberthy, M.D.

The speaker: The report of the delegates to the American Medical Association will be referred to the Reference Committee on Officers' Reports.

Before we proceed with the next item of business, I want to call your attention to the fact that last year the House of Delegates referred ten items of business to The Council. The discussion and disposition of those items appears on page 72 of the Handbook. I would suggest you read them.

VII. REPORT OF WOMAN'S AUXILIARY TO MSMS

By Mrs. W. S. Stinson, President

This is the fourth year that the President of the Auxiliary has appeared before you to report our activities of the past year. In the continuance of this procedure you

are evidencing a faith in the importance of your Auxiliary. For this faith and confidence we are grateful, and I am happy to be the one to bring the message this year.

It has aptly been said, "A man of words and not of deeds is like a garden full of weeds." I shall try to make my words as brief as possible, but still tell you enough of the deeds of 1953-1954 so that I may convince you that the Auxiliary is not "a garden full of weeds."

No organization is healthy if it does not continue to grow or expand. Despite the fact that it is the only organization to which only doctors' wives may belong, the Michigan Auxiliary still has a lot of growing to do before its membership comes within sight of its parent organization.

However, our record of the past year is hopeful and encouraging. Wayne County, where there still is the greatest discrepancy between numbers in the County Medical Society and in the Auxiliary, gained over 100 new members. Ingham County gained sixty—an increase of 65 per cent. Six new county Auxiliaries were organized during the year. These are: Cass, Chippewa-Mackinac-Luce, Hillsdale, Lenawee, Livingston and Van Buren. In several of these counties I understand this organization came as the result of the insistence of the doctors.

We are, of course, extremely grateful to you gentlemen from these areas; but this word of caution I would like to leave with you: Those Auxiliaries will not be apt to survive for long if you men do not continue to be interested in them, to encourage them, to ask for their assistance, and to give them something worth-while to do.

Just as an organization is decadent if it fails to grow, so is it lacking in merit if it doesn't have a worth-while purpose. I can't possibly tell you of all the projects and activities which the forty-nine groups with their 2,516 doctors' wives do in Michigan; but I'd like to mention a few that I feel really take top billing.

In the field of health education we co-sponsor with the Michigan Tuberculosis Association a tuberculosis essay and radio speech contest. Last fall 2,907 high school students made a study of tuberculosis and wrote essays on the subject, and the winning scripts were delivered before audiences totaling an estimated 14,000 people.

The magazine, *Today's Health*, is the most authentic health publication available to the lay public. The American Medical Association publishes it and makes the Auxiliaries in all states responsible for its circulation. In Michigan this year 1,231 subscriptions were obtained. Many were given by county Auxiliaries to schools, Y's, civic centers, and so on. Many more copies of the magazine should be coming into Michigan. It certainly would make much better reading for patients than some of those year-old copies of *Collier's* which some of you men keep lying around your waiting rooms.

Still in the field of health education, all over the State the county Auxiliaries have sponsored meetings for the education of their citizens, on such health problems as gereontology, narcotics, veteran medical care, child guidance, mental health, and so on.

The one project most enthusiastically worked upon by the greatest number of counties is nurse recruitment. Last spring we made a survey of all our counties to see just how many loans or scholarships were being granted to needy girls, and what their value was. We found that over half the counties maintained such a fund, and that last year over $6,000 was donated by the Michigan Auxiliary for nursing education.

This financial means of recruiting is the most popular, but other devices seem of equal or greater importance. In Muskegon, for instance, twenty-two Auxiliary members sponsor eleven Future Nurse Clubs in the high schools. Bay County assisted in forming fifteen Future Nurse Clubs in small towns where there is little vocational guidance; then they arranged for a workshop for faculty sponsors of the Clubs. Tuscola County has only fourteen members, but they gave a tea and a recruitment program for 125 high school girls a year ago, and six of those girls are now in nurse training.

Almost every county has a favorite community service which it carries on from year to year. Two counties have complete responsibility for the Easter Seal sale for Crippled Children. In some small towns the medical Auxiliary takes the place of the hospital Auxiliary. Seventeen counties collect sample drugs from the offices of dentists and physicians and ship this material to the Medical and Surgical Relief Committee, which in turn sends it to needy countries overseas. In all counties where the Salk polio test was conducted, the assistance of the Auxiliary was offered. A sum exceeding $1,200 has gone this year from the Michigan Auxiliary to the American Medical Education Foundation.

This year we have stressed more than anything else the importance of each individual member taking an active part in her community's activities—in being a good citizen. Of course, "P.R." still means "public relations," but we chose to interpret it as "personal responsibilities." An awareness of this personal responsibility is bound to create good public relations. Particularly is this philosophy important where the membership of a county, or several counties, is scattered with one in each town. There it is difficult for the organization as a unit to do too much.

However, it seems worth mentioning that in our largest county, where a telephone survey of about three-fourths of the membership was made—an astronomical feat—it was found that 2,578 volunteer hours were given per week by doctors' wives to such agencies as Heart, Polio, Cancer, Tuberculosis, and so on. It was an average of over seven and one-half hours per week per woman. I have no doubt that it would be higher in smaller communities.

I suppose there is not too much to be gained from such a survey, but it may create for the woman who is doing nothing an awareness of her lethargy. Also, we shall have a reply for the next person who says that doctors' families are poor citizens of the community.

On both the State and county level the Auxiliary stands ready at any time to assist the Medical Society in any manner possible. Members are kept informed on current medical legislation by bulletins from both Lansing and Washington. In Ingham County, once each year, the wives of all State legislators are beautifully entertained by the doctors' wives.

In enumerating these many activities of your Auxiliary it has been my purpose to inform you that it is an organization made up of your wives, interested in the health and welfare of your community, and, through this interest and the work involved, creating a better attitude on the part of John Doe, Citizen, toward the medical profession as a whole.

At this time I should like to express appreciation, both personally and in behalf of the Auxiliary, for the wonderful support and assistance given by the Michigan State Medical Society. The personnel in the office at Lansing has been most co-operative. We are extremely grateful for all of the mimeographing done there and for the printing of our News Sheet. To The Council I say "Thank You" for the financial assistance granted us. I am especially pleased that the decision has been made to print addresses along with names in our Roster in The Journal.

To act as President of the Auxiliary, to attempt to correlate and guide the activities of 2,516 women without a central office or paid assistance, is not a particularly easy job. During the past twelve months I have driven my car over 5,000 miles in Michigan, in addition to traveling by plane or train to and from Chicago, Columbus and San Francisco. Over 700 communications have gone out from my desk. No record of the time thus consumed has been kept.

There is, of course, a certain honor associated with

the position. The friendships formed and the acquaintances made shall make my life richer forever after. To me, however, my greatest reward has come from the knowledge that my husband is a physician. I am proud of him because I believe his is the greatest profession in the world. This was my chance, in my very small way, to serve that wonderful profession.

* * *

THE SPEAKER: This very stimulating report will be referred to the Reference Committee on Officers' Reports.

VIII. SELECTION OF MICHIGAN'S FOREMOST FAMILY PHYSICIAN

I will ask the Secretary to read the biographical data on the three men who have been selected for your balloting, following which you will be asked to vote, using the first ballot in the Handbook.

I will ask Dr. Teed and Dr. Dibble if they will act as tellers.

(Secretary Foster read the biographical data on the three candidates.)

THE SPEAKER: Thank you, Dr. Foster. The three nominees for this honor are Dr. Bloom, Dr. McColl and Dr. Sherk. You will vote for one man.

(Balloting.)

I have been handed the tellers' report and Duncan J. McColl, M.D., Port Huron, has been chosen. (Applause.)

IX. ELECTION OF L. FERNALD FOSTER, M.D., AS PRESIDENT-FOR-A-DAY

F. W. BASKE, M.D. (Genesee County): I have a motion which I believe is presented on behalf of the entire Michigan State Medical Society. It reads as follows:

Because of his outstanding work in Michigan medicine, as well as in national circles, and because of his unusual devotion and loyalty to the work of this organization, I move that our Secretary, L. Fernald Foster, M.D., be elected President-For-A-Day, and that the rules of the Society be set aside permitting action on this motion without consideration by a reference committee.

THE SPEAKER: That requires a second.

O. J. JOHNSON, M. D. (Bay City): I wish to second the resolution of the Genesee County delegation to elect Dr. L. Fernald Foster President-For-A-Day.

In the span of eighteen years that Dr. Foster has been Secretary of MSMS there has been a marked change in responsibilities and activities of organized medicine. Through his vision and interest he has kept MSMS in the enviable position of leader among state societies. The part that he has had in placing MSMS at the top is recognized throughout the United States. Few members realize the time and effort that he has expended as well as we in Bay County. The time he has unselfishly devoted to MSMS, to the sacrifice of his personal interests, is very apparent to us who practice with him.

Therefore, it is a privilege to participate and support this action, which gives public recognition and expresses the feeling of regard and appreciation of the service, leadership and vision that Fern Foster has rendered to us, to our patients, and to the practice of medicine throughout Michigan and the United States.

THE SPEAKER: Thank you. Those voting "yes" will please rise.

(The audience arose and the motion was carried unanimously.)

THE SPEAKER: The voting is recorded as unanimous. Congratulations, Dr. Foster. Would you like to say a few words?

SECRETARY FOSTER: Mr. Speaker and members of the House, this is the first time I have been caught short for words that I can recall. This is a total surprise to me. All I can say to you is "Thank you."

(The meeting was recessed at 12:20 p.m.)

MONDAY AFTERNOON SESSION

September 27, 1954

The meeting reconvened at 2:15 p.m., J. E. Livesay, M.D., Speaker of the House, presiding.

X. RESOLUTIONS AND MOTIONS

X—1. RESOLUTION GRANTING HONORARY MEMBERSHIP TO DON E. JOHNSON, FLINT

C. W. COLWELL, M. D., (Genesee County):

"WHEREAS, Mr. Donald E. Johnson of Flint has rendered distinguished services to medicine in his outstanding work in the lay cancer field, and

"WHEREAS, Mr. Johnson has given unstintingly of his time and resources to further research in cancer, to provide professional and lay education, and to stimulate public interest in the cancer problem, and

"WHEREAS, he has solely financed the Genesee County Annual Cancer Day which after ten years has become one of the outstanding cancer programs in the country, and

"WHEREAS, he has been honored nationally by being given an executive appointment as a Director of the National Research Cancer Center in Bethesda, Maryland, as well as being elected a National Director of the American Cancer Society, and

"WHEREAS, he is an Honorary Member of the Genesee County Medical Society. The Michigan State Medical Society Bylaws, Chapter V, Section 2, provide for Honorary Membership in MSMS; therefore, be it

"RESOLVED: That Mr. Donald E. Johnson be awarded honorary membership in the Michigan State Medical Society."

"Submitted by the
Genesee County Medical Society"

THE SPEAKER: This resolution will be referred to the Reference Committee on Special Memberships.

X—2. RESOLUTION RE STUDY OF ANESTHETIC FEES BY INSURANCE COMPANIES AND MMS

W. S. STINSON, M.D. (Bay-Arenac-Iosco County): The following resolution was passed by the Bay-Arenac-Iosco County Medical Society on September 22, 1954:

"WHEREAS, more doctors of medicine are devoting time to anesthesiology, and

"WHEREAS, the present fee schedules of insurance companies for anesthetics are in many cases, inadequate for the time and skill involved, and

"WHEREAS, the Michigan Medical Service did not increase their fee for this service with the revision of other fees; therefore, be it

"RESOLVED: That the House of Delegates request of insurance companies a study of the question of anesthetics, with a view to revising upward the present fee schedule, making them more adequate for the services rendered by doctors of medicine; and be it further

"RESOLVED: That the House of Delegates recommend to Michigan Medical Service that their fee for anesthetics be increased for the same reason."

THE SPEAKER: This resolution will be referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—3. RESOLUTION RE HOSPITAL STAFF STUDY OF MHS UTILIZATION

W. S. Reveno, M.D. (Wayne): I have a resolution from the Advisory Committee to Michigan Hospital Service that reads as follows:

"WHEREAS, the MSMS Advisory Committee to Michigan Hospital Service and its representatives have been unable to achieve maximum results in their efforts to implement the suggestions for proper utilization of hospital services because of delay on the part of hospital staffs to appoint special committees for this purpose, as recommended by the House of Delegates of the MSMS at its 1953 session; therefore, be it

"RESOLVED: That the following recommendation be respectfully transmitted to the President of the Michigan Hospital Association and to the chiefs of staff of all participating hospitals of Michigan Hospital Service, with the request that it be presented for approval by their staff membership; and when so approved, each hospital administrator or representative be invited to present the following recommendation to his hospital medical staff for early consideration.

" 'A committee of —— members of the medical staff of ———————— Hospital be appointed by the Chief of Staff, whose duty it shall be to review periodically the hospital records of patients admitted under prepayment hospital contracts and to assess the propriety of service utilization. This committee shall be the sole agency for contact between duly authorized representatives of the Michigan State Medical Society Advisory Committee to Michigan Hospital Service in matters pertaining to patient services under the contracts.' "

The speaker: This solution will be referred to the Reference Committee on Resolutions.

X—4. RESOLUTION RE BY-LAW CHANGES AFFECTING MEMBERSHIP

R. A. Johnson, M.D. (Wayne): Mr. Speaker, I have eight items that have to do with the Constitution and Bylaws of the Michigan State Medical Society. Most of these items are in the field of clerical errors and misprint. If you will turn to page 145 of your Handbook you will be able to trace the changes as proposed.

Chapter 5, Section 3 (f): Add after ". . . on account of protracted illness," "provided his membership dues are paid to the end of the preceding calendar year."

Chapter 5, Section 3 (g): Add after ". . . postgraduate medical studies," "provided his membership dues are paid to the end of the preceding calendar year."

Chapter 5, Section 4: Add after ". . . may be transferred to the retired members' roster," "provided his membership dues are paid to the end of the preceding calendar year."

Chapter 5, Section 5: Add after ". . . of his own component county society," "provided his membership dues are paid to the end of the preceding calendar year."

Chapter 5, Section 8: Delete the words "Only active members are eligible to . . .," this Section then to read:

"Section 8: "For retired or life membership, the component county society of such members . . ."

Chapter 6, Section 6: Delete reference to Section 3, Chapter 6. Section 6 then should read:

"Sec. 6: In the event that a hearing shall have been had before an appropriate committee of a component county society as provided in Section 5, Chapter 6 . . ."

Chapter 8, Section 1—Composition of House of Delegates: Add "retired" members so that MSMS obtains the benefit of the total number of retired members in the counties to the AMA on membership.

Section 1 then should read: ". . . one delegate for each fifty voting members, active, life and retired, and one delegate for each additional major fraction thereof."

Chapter 15, Section 2: Add after ". . . properly remitted," "unless his name is to be submitted for election to one of the special memberships listed in Chapter 5 at the next succeeding annual meeting of the House of Delegates."

The speaker: All of these items will be referred to the Reference Committee on Constitution and Bylaws.

X—5. RESOLUTION RE MIGRANT WORKERS

Otto Vander Velde, M.D. (Ottawa):

"WHEREAS, the State of Michigan annually imports several thousand migrant laborers, and

"WHEREAS, the health of much of this imported labor is often questionable, and

"WHEREAS, the employers of this labor frequently do not provide proper housing and sanitary facilities, and

"WHEREAS, many health hazards are thereby created to our own people; therefore, be it

"RESOLVED: That the Michigan State Medical Society call the attention of this health problem to the proper authorities through the continued activity of the Migrant Worker Study Committee."

The speaker: This will be referred to the Reference Committee on Hygiene and Public Health.

X—6. RESOLUTION RE PANEL ON UNDERGRADUATE MEDICAL EDUCATION

Otto Vander Velde, M.D. (Ottawa):

"WHEREAS, there is a constant growing interest in medical education on the part of our profession and the general public, and

"WHEREAS, there is a continually growing need for more physicians to serve an ever-increasing population, and

"WHEREAS, there is great need that we as physicians become more informed as to present facilities and future plans for increase in these facilities to meet this growing need; therefore, be it

"RESOLVED: That The Council of the Michigan State Medical Society arrange with the deans of our two medical schools for a panel discussion on undergraduate medical education. This panel discussion is to be a part of the program of a State meeting of the MSMS at some future date."

The speaker: This resolution will be referred to the Reference Committee on Miscellaneous Business.

X—7. RESOLUTION RE EXPANSION OF AMA ADMINISTRATIVE FACILITIES

C. L. Candler, M.D.: (Wayne):

"WHEREAS, the development and effectiveness of scientific medicine with comparable demand for its distribution places health care economically on the level of a national business concern, and

"WHEREAS, if we want medicine to remain within the realm of private enterprise and our leaders to continue to determine its policies, free from pressure groups who presume federal health insurance to be the answer, we should follow the methods of successful private enterprise, and

"WHEREAS, the organization of the American Medical Association is a representative one, from the President, Trustees, and headquarters staff down through the state and county societies, and should remain as presently organized, and

"WHEREAS, if the American Medical Association is to lead the health professions and the allied organizations in the ways of private enterprise, we must aid our officers and delegates by the expansion of our administrative and fact-finding facilities at headquarters; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society instruct our delegates to the AMA to use their influence to place before the

delegates of the AMA at the interim meeting in December, a resolution that a committee be appointed by the Board of Trustees to study the problems set forth in this resolution, and to bring in a report at the following annual meeting of the House of Delegates to the AMA in 1955."

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

X—8. RESOLUTION RE CHANGE IN NAME OF MENTAL HYGIENE COMMITTEE

C. K. HASLEY, M.D. (Wayne):

"WHEREAS, the Mental Hygiene Committee of the Michigan State Medical Society, at its meeting of April 21, 1954, adopted a motion to the effect that the name should be changed to the 'Committee on Mental Health,' and

"WHEREAS, this recommendation was referred to and approved by the Executive Council of the Michigan State Medical Society on May 9, 1954, and

"WHEREAS, the Committee referred this recommendation to the Reference Committee on Constitution and Bylaws; therefore, be it

"RESOLVED: That in the Bylaws, Chapter 10, Section 3, the name 'Committee on Mental Hygiene' be changed to 'Committee on Mental Health.'"

THE SPEAKER: This resolution will be referred to the Reference Committee on Constitution and Bylaws.

X—9. RESOLUTION RE FEES FOR SURGICAL ASSISTANTS

R. F. FENTON, M.D. (Wayne):

"WHEREAS, the members of the 1954 House of Delegates of the AMA reaffirmed their previous position in regard to the ethical way of billing a patient when more than one physician is in attendance on a case, in that separate statements must be rendered by the participating doctors, and

"WHEREAS, that body took cognizance of the fact that this does not settle the problem where the question of insurance is involved, and

"WHEREAS, recognition was taken of the fact that in several states voluntary insurance plans have incorporated fees for surgical assistants, and

"WHEREAS, a suggestion was made that voluntary plans in other states be encouraged to consider such action also, and

"WHEREAS, an opinion has been rendered by a competent firm of attorneys stating that it would not be contrary to law to pay such fees when separate checks are issued; therefore, be it

"RESOLVED: That this House of Delegates petition the Michigan Blue Shield to reconsider their action in this regard, and attempt to work out a provision whereby in those hospitals having none or an insufficient number of residents and interns, upon the request of the operating surgeon a fair and equitable fee shall be paid to the family physician assisting in the case."

THE SPEAKER: This resolution will be referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—10. RESOLUTION RE COUNTY MEDICAL SOCIETY RESPONSIBILITY IN MEDICAL CIVIL DEFENSE

M. L. LICHTER, M.D. (Wayne):

"WHEREAS, with the development of the hydrogen bomb, effective medical civil defense planning must be done on a state basis since each area is dependent for survival on adjacent communities; this has been recognized by the Committee on Emergency Medical Service of the Michigan State Medical Society; and

"WHEREAS, The Council of the State Society has expressed its awareness of this fact and has approved a State medical defense plan, and

"WHEREAS, the Councilors of the several districts, with the approval of The Council of the State Society, designated representatives to provide the component county societies with a method of implementing the State medical defense plan, and

"WHEREAS, the activation of this program is dependent on the development of county units that can be integrated and co-ordinated with the State plan, and

"WHEREAS, several of the counties have been lax in developing local programs, and in this way have not only vitiated the State plan but the activities of other county medical societies; therefore, be it

"RESOLVED: That the House of Delegates urge each constituent society to assume its responsibility and organize immediately a medical civil defense unit in support of the State plan."

THE SPEAKER: This resolution will be referred to the Reference Committee on Emergency Medical Service.

X—22. RESOLUTION RE SURGICAL ASSSISTANTS' FEES

O. J. JOHNSON, M. D. (Bay-Arenac-Iosco): At a meeting of the Bay-Arenac-Iosco County Medical Society September 22, 1954, the following resolution was passed:

"WHEREAS, the surgical fee paid by the insurance company is the only fee that may be recovered in many cases, and

"WHEREAS, the House of Delegates of the AMA in June, 1954, approved the opinion of the Judicial Council of the AMA that it is ethical for private insurance companies to pay the surgical fee in part to the operating surgeon and the remainder to the attending physician who has actually and in person aided in the care of the patient, therefore, be it

"RESOLVED: That the House of Delegates of the MSMS recommend to Michigan Medical Service that it pay surgical fees to the operating surgeon and to the attending physician, who has actually and in person aided in the care of the patient, in amounts as specified by and if requested by the operating surgeon."

X—11. RESOLUTION RE PERIODIC HEALTH EXAMINATIONS BY CERTAIN HOSPITAL STAFFS

L. T. HENDERSON, M.D. (Wayne):

"WHEREAS, certain organizations demand periodical examinations of certain of ther members, and

"WHEREAS, certain hospital staffs have been organized to conduct these examinations, and

"WHEREAS, there arises the question of interference with the patient-physician relationship which represents the basic philosophy of the best method of medical practice; therefore, be it

"RESOLVED: That the value and ethical implications of this practice be evaluated by the House of Delegates of the Michigan State Medical Society; and be it further

"RESOLVED: That this matter be introduced at the next meeting of the American Medical Association if this House of Delegates decides that this situation has sufficient merit."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

X—12. RESOLUTION RE HOME-TOWN VETERANS ADMINISTRATION MEDICAL CARE PROGRAM

D. W. THORUP, M. D. (Berrien):

"WHEREAS, the veterans care program under the Michigan Medical Service does not become operative

until after a request for authorization has been received from the private physician, and

"WHEREAS, the disability is frequently cured prior to receipt of such authorization, and

"WHEREAS, the greatest majority of disabilities are not service-connected and could be financially met by personal means of most such afflicted veterans, and

"WHEREAS, serious chronic disabilities might be better cared for in a veterans' facility; be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society request the Michigan Medical Service to discontinue the veterans' care program."

THE SPEAKER: This resolution will be referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—13. RESOLUTION RE PUBLIC RELATIONS FUNDS.

D. W. THORUP, M.D.

"WHEREAS, the urgency for the Michigan State Medical Society special dues of $20 yearly for public relations has lessened, and

"WHEREAS, the real core of good public relations is individual physician-patient relationship, and

"WHEREAS, improvement in service to the public can frequently be performed better by county societies than the state organization; therefore, be it

"RESOLVED: That any county society wishing to carry on local public relations in the way of a service program or other acceptable means, may request of the Michigan State Medical Society fund allocated for such purposes in an amount not to exceed one-half of the amount paid in by such counties for this purpose. The decision on the granting of each request shall rest with The Council of the Michigan State Medical Society."

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

X—14. RESOLUTION RE LIBERALIZATION OF MMS BENEFITS

D. G. PIKE, M.D. (Grand Traverse-Leelanau-Benzie County):

"WHEREAS, the development and subsequent improvement of a voluntary health insurance program has been a primary interest of the Michigan State Medical Society, and

"WHEREAS, the broadening of benefits of such a program to include realistic protection against the medical costs of all illness, medical as well as surgical, is an essential in the further improvement of such a program, and

"WHEREAS, consultations are a recognized vital need for the proper care of some hospitalized patients, and

"WHEREAS, services rendered medical patients vary widely with the nature of the medical problems presented, so that unusual time and/or skill may be necessary for their proper care; therefore, be it

"RESOLVED: That the Grand Traverse-Leelanau-Benzie County Medical Society does hereby resolve that a recommendation for the following changes in the benefits of the Michigan Medical Service, The Blue Shield Plan, be respectfully submitted to the House of Delegates of the Michigan State Medical Society at the next annual meeting, for transmittal to the Board of Directors of Michigan Medical Service:

"1. Provision for coverage in total, or part, of medical and/or surgical consultation fees for services necessary for the proper care of hospitalized patients, just as the plan now covers similar fees for x-rays, laboratory, and pathological consultative services.

"2. Increase of prevailing benefits for medical services to cover unusual services, incident to the care of medical cases, on a schedule of benefits that will compensate for the varying amounts of time and skill that are necessary in caring for the various medical problems, just as the schedule of benefits now does for the various surgical procedures."

THE SPEAKER: This will be referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—15. RESOLUTION RE REVISION OF BLUE SHIELD FEE SCHEDULE

F. C. RYAN, M.D. (Kalamazoo):

"WHEREAS, the doctors and hospitals of Michigan have been faced with rising costs for the past several years, and the hospitals have had several increases in their Blue Cross schedules, and

"WHEREAS, the doctors of Michigan have had several adjustments in the fee schedule not commensurate with the general rise in the cost of living and not commensurate with fees paid to doctors by some other insurance companies, and

"WHEREAS, there are inequities in the fee schedule concerning several branches of medicine, including radiology and anesthesia; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society recommend to the Board of Directors of Michigan Medical Service that it study and revise its fee schedule to be consonant with the economic realities of the present time."

THE SPEAKER: This will be referred to the Reference Committee on Medical Service and Prepayment Plans.

X—16. RESOLUTION RE TRAFFIC SAFETY

J. R. RODGER, M.D. (Northern Michigan County):

"WHEREAS, Michigan doctors of medicine have a responsibility for supporting all efforts to prevent sickness and accidents, and

"WHEREAS, the 1953 Michigan traffic toll of 1,925 fatalities and 57,300 persons injured represents a human and economic waste which is intolerable and largely unnecessary, and

"WHEREAS, the Michigan State Safety Commission and the Michigan Traffic Safety Federation have rendered invaluable service in pointing the way toward possible solutions of this problem; therefore, be it

"RESOLVED: That this House of Delegates strongly urge the Michigan State Safety Commission and the Michigan Traffic Safety Federation to redouble their efforts toward creating a lower highway accident rate for Michigan; and be it further

"RESOLVED: That the recommendation of the Michigan Highway Safety Seminar of January 2, 1954, calling for increased numbers of State police, receive our specific support; and be it further

"RESOLVED: That individual members of the Michigan State Medical Society, by way of the Secretary's Letter, be urged to acquaint themselves with the fact of the presence or absence of driver training programs in the schools of their respective communities, and, where such a program does not exist, to strongly urge its initiation; and be it further

"RESOLVED: That the House of Delegates instruct the President of the Michigan State Medical Society to appoint a committee to study traffic accident prevention in the State of Michigan."

THE SPEAKER: This resolution will be referred to the Reference Committee on Legislation and Public Relations.

X—17. RESOLUTION RE EXTENSION OF MSMS PERIODIC HEALTH APPRAISAL PROGRAM

J. R. RODGER, M.D.: (Northern Michigan Counties)

"WHEREAS, the Committee on Periodic Health Appraisal of the Michigan State Medical Society and the Michigan Health Council has outlined a workable plan whereby Michigan doctors of medicine can serve their patients with periodic health appraisals, and

"WHEREAS, The Council of the Michigan State Medical Society in its supplemental report to this House of Delegates has endorsed the recommendations of the above Committee; therefore, be it

"RESOLVED: That each member of this House of Delegates, being a chosen leader of organized medicine in his area, enthusiastically forward the periodic health appraisal program among his colleagues and his patients, not forgetting himself as a patient."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

X—18. RESOLUTION RE MEMORIAL IN THE JOURNAL MSMS TO THE LATE E. D. SPALDING, M.D.

F. D. JOHNSON, M.D. (Genesee):

"WHEREAS, the House of Delegates of the Michigan State Medical Society feels deeply the untimely loss of Dr. Edward D. Spalding, who symbolized idealism, hard work, fair play, forthrightness and the courage to crusade for the right; therefore, be it

"RESOLVED: That this House recommend that THE JOURNAL of the Michigan State Medical Society reserve a column entitled 'The Right to Our Opinions' as a reminder to all of us that Dr. Edward D. Spalding did much toward preserving for us the right of free expression; and be it further

"RESOLVED: That a copy of this resolution be sent to the surviving members of his family."

Mr. Speaker, I would like to have this resolution adopted by the House without referral to a reference committee.

R. W. TEED, M.D. (Washtenaw): I second that.

(The motion was put to a vote and was carried unanimously.)

X—8. RESOLUTION RE CHANGE IN NAME OF MENTAL HYGIENE COMMITTEE

R. L. NOVY, M.D. (Wayne): This is a resolution in regard to Bylaw changes.

"WHEREAS, the American Medical Association designates its committee concerned with mental health and mental hygiene problems as the 'Committee on Mental Health,' and

"WHEREAS, it is in the interests of unity of function and title that similar committees of state medical societies be so designated; therefore, be it

"RESOLVED: That the Bylaws of the Michigan State Medical Society, Chapter X, Section 3, line 10, be changed to read 'Committee on Mental Health' in lieu of 'Committee on Mental Hygiene.' "

THE SPEAKER: An identical motion has been presented, Dr. Novy. We will refer them both to the Reference Committee on Constitution and Bylaws.

(K. H. JOHNSON, M.D., assumed the Chair.)

XI. REPORTS OF STANDING COMMITTEES

CHAIRMAN JOHNSON: Item 15 on the agenda concerns reports of standing committees. Instead of spending the time to assign each report to a standing committee, I will simply tell you that this portion of these reports will be referred to the standing committee as I call the name.

XI—1. COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

Report of the Committee on Postgraduate Medical Education appears on page 83 of the Handbook.

XI—2. PREVENTIVE MEDICINE COMMITTEE AND SUBCOMMITTEES

The Preventive Medicine Committee's report appears on page 90 of the Handbook.

Committee on Rheumatic Fever Control.—The report appears on page 93 of the Handbook.

There is no report in the Handbook from the Cancer Control Committee.

Maternal Health Committee.—The report appears on page 95 of the Handbook.

Report of the *Venereal Disease Control Committee.* —This report appears on page 97 of the Handbook.

Report of the *Tuberculosis Control Committee* appears on page 100.

The report of the *Industrial Health Committee* appears on page 105.

Report of the *Mental Hygiene Committee,* page 107.

The report of the *Child Welfare Committee* appears on page 109. This includes the reports of the three subcommittees as listed.

The report of the *Iodized Salt Committee* appears on page 110.

The report of the *Geriatrics Committee* appears on page 111.

XI—3. PUBLIC RELATIONS COMMITTEE AND SUBCOMMITTEES

The report of the *Public Relations Committee and subcommittees* begins on page 112.

XI—4. ETHICS COMMITTEE

The report of the *Ethics Committee* appears on page 124.

XI—5. LEGISLATIVE COMMITTEE

The report of the Legislative Committee appears on page 124.

All of these reports of standing committees will be referred to the Reference Committee on Standing Committees.

XII. REPORTS OF SPECIAL COMMITTEES

XII—1. BEAUMONT MEMORIAL COMMITTEE

The report of the Beaumont Memorial Committee appears on page 127.

XII—2. SCIENTIFIC RADIO COMMITTEE

The report of the Scientific Radio Committee appears on page 129.

XII—3. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

The report of the Advisory Committee to the Woman's Auxiliary appears on page 130.

XII—4. ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

The report of the Advisory Committee to the Michigan State Medical Assistants Society appears on page 131. Is there a further report from this Committee?

OTTO VANDER VELDE, M.D.: As Chairman of that Committee, the report was submitted by me. The second paragraph reads: "The subject of constitutional revision in regard to eligibility of membership was discussed at some length, and a tentative revision was suggested to The Council of the Michigan State Medical Society. These suggeestions are still under consideration for a future meeting."

I would like to report in addition that The Council has considered this revision to the Constitution of the Michigan State Medical Assistants Society. The revision reads as follows:

"In order to more clearly define eligibility for membership, your Executive Board . . . recommends that Article IV, Section 2, Part A of our Constitution"—that refers to the Constitution of the Medical Assistants Society—"be changed to read, 'Active membership is open

to any eligible person actively employed in a technical or in an administrative capacity in the office or laboratory of a member of the Michigan State Medical Society. Also, administrative employees in the offices of medical hospitals or medical laboratories of the State of Michigan, on application and acceptance by the Membership Committee, subject to approval by the Executive Committee."

This change in the Constitution of the Medical Assistants Society will be brought up to their meeting on Wednesday, as I understand it.

CHAIRMAN JOHNSON: This additional report from the Advisory Committee to the Medical Assistants Society will be referred, with the previous report, to the Reference Committee on Special Committees.

This meeting of the House of Delegates will stand recessed until eight o'clock this evening.

(The meeting recessed at 3 p.m.)

MONDAY EVENING SESSION

September 27, 1954

The meeting reconvened at 8:15 p.m., J. E. Livesay, M.D., Speaker of the House, presiding.

X—19. RESOLUTION RE COMMENDATION OF STATE HEALTH COMMISSIONER

G. T. MCKEAN, M.D. (Wayne):

"WHEREAS, Albert E. Heustis, M.D., has served as Commissioner of Health of the State of Michigan in a superior manner, and

"WHEREAS, Dr. Heustis has co-operated to an admirable degree with committees and members of the Michigan State Medical Society; therefore, be it

"RESOLVED: That this House of Delegates commends Dr. Heustis on his activities and hopes that his service will continue to be available in the co-operative spirit shown in the past; and be it further

"RESOLVED: That Dr. Heustis be sent a copy of this resolution."

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

X—20. RESOLUTION RE GREATER UNIFORMITY BY BASIC SCIENCE BOARDS

J. D. FRYFOGLE, M.D. (Wayne):

"WHEREAS, the Basic Science Board exists for the purpose of maintaining a high standard in candidates who wish to practice the healing arts, and

"WHEREAS, the Basic Science Board's function is to pass on or screen undesirable candidates who cannot so qualify and

"WHEREAS, there still exists a gross discrepancy between the many similar examining boards of other states and of the State of Michigan as to what qualifies a candidate for reciprocity, i.e., acceptance of basic science examinations or certificates, National Board certificates or Basic Science portion of other state board examinations, and.

"WHEREAS, the State of Michigan and the medical profession would benefit by admittance of fully qualified practitioners; therefore, be it.

"RESOLVED: 1. That greater uniformity of the basis for reciprocity be brought about.

"2. That candidates whose academic or professional qualifications clearly make them desirable practitioners be given reciprocity."

THE SPEAKER: This will be referred to the Reference Committee on Legislation and Public Relations.

X—21. RESOLUTION RE DIVISION OF FEES

L. F. HAYES, M.D. (North Central):

"WHEREAS, there exists considerable confusion regarding (1) legality and (2) ethics of division or apportionment of fees, which is often called fee splitting, and

"WHEREAS, the House of Delegates of the American Medical Association at their meeting in San Francisco in June, 1954, adopted the report of the Judicial Council, which deems ethical the practice of combined billing to (1) nonprofit insurance companies; (2) patients who so request, provided that (1) the bills are itemized as to each physician's service and fee and (2) separate checks are rendered in payment, and

"WHEREAS, legal opinion given to the Michigan Medical Service and conveyed to The Council of the Michigan State Medical Society further confuses the issue by stating in paragraph I that apportionment of fees is illegal under the laws of Michigan but in paragraphs II and III state that plans whereby a surgeon receives a lesser fee for less service or a physician receives compensation for services rendered is not considered apportionment of fees, and

"WHEREAS, the legality of the issue in the State of Michigan seems to depend upon whether the medical fraternity considers the practice ethical; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society now in session be allowed to vote, by ballot, without referring the matter to committee, on the following question: 'Is the division of fees considered ethical if the following criteria are observed: (1) the billing is clearly understood by the patient and participating physicians; (2) is rendered in adequately itemized form; (3) wherein the apportionment is commensurate with services rendered by each physician, and (4) for which payment is rendered separately?'"

THE SPEAKER: Dr. Hayes, you have raised a question of parliamentary law. Actually, our Bylaws state that such resolutions must be referred to a reference committee. We cannot move in one session to set aside the Bylaws. I appreciate the fact that on two or three occasions the Chair has permitted such action on resolutions of a congratulatory nature or resolutions honoring some member, but in questions such as this the Chair believes the motion out of order to handle this immediately without reference to a reference committee.

Therefore, it will be referred to the same committee that has handled this question before, the Reference Committee on Medical Service and Prepayment Insurance.

L. F. HAYES, M.D.: If I might question you for just a moment, the resolution does not ask for a change in the Bylaws or Constitution. The Bylaws and Constitution, as far as I can see, do not cover this situation, and the resolution is just to have a question answered.

R. A. JOHNSON, M.D.: Mr. Speaker, I move to sustain the decision of the Chair.

May I speak on that motion, sir? At a reference committee meeting various other individuals who may have knowledge on the matter at hand are called in in consultation. For that and many other reasons that you know better than I, Mr. Speaker, I move to sustain the decision of the Chair.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

VIII. MICHIGAN'S FOREMOST FAMILY PHYSICIAN

This morning we elected Michigan's Foremost Family Physician. Dr. McColl is with us here tonight, and I would like to present him to you. Dr. McColl.

(The audience arose and applauded.)

XIII. REPORTS OF REFERENCE COMMITTEES

XIII—1. ON OFFICERS' REPORTS

D. G. Pike, M.D.: (Grand Traverse-Leelanau-Benzie Counties)

(a) *Speaker's Address.*—The Reference Committee wishes to commend the Speaker on his thoughts in regard to unity of effort of the proceedings of the House of Delegates, and recommends its approval.

(b) *President's Address.*—The Reference Committee extends commendation to the President for his address, and wishes to accent his thought on the continued threat of socialized medicine. The Reference Committee recommends approval.

(c) *President-elect's Address.*—The Reference Committee, in reviewing Dr. Baker's address, is wholly in accord with its theme, and wishes to emphasize his remarks in regard to the poor distribution of activity among the 5,000-odd members of the Michigan State Medical Society. It is suggested by the Reference Committee that the delegates of this House attempt to instill more interest among its less active members by urging responsibility in active participation.

(d) *Report of the Delegates to the AMA.*—The report of the delegates to the American Medical Association was reviewed, and the Reference Committee wishes to heartily commend our representative group to the House of Delegates of the AMA for the tremendous amount of work that it has done. The Committee recommends that the report be accepted, with the comment that it hopes the House of Delegates of the Michigan State Medical Society will clarify by resolution at this session the controversy between the apportionment of fees as deemed ethical by the AMA, and the legal opinion as rendered in the report on this question in the annual report of The Council.

(e) *Report of the Woman's Auxiliary to the MSMS.*—The Reference Committee recommends approval (with gratitude) of the report as given by Mrs. W. S. Stinson, President of the Woman's Auxiliary, noting the suggested use of *Today's Health* as office reading material, the great work done in recruiting of nurses, and their contribution to all avenues of health education. In keeping with the Auxiliary's emphasis on community service, we humbly suggest that the Auxiliary might name from their own ranks a "Community Servant of the Year" to be honored along with this Society's Foremost Family Physician at each fall annual session. It is further suggested that The Council make available to the Auxiliary, if possible, some help with the great amount of secretarial work demanded of the officers.

Mr. Speaker, this completes the report of the Reference Committee on Officers' Reports.

I move the acceptance of this report.

O. K. Engelke, M.D. (Washtenaw): Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—2. ON REPORTS OF THE COUNCIL, INCLUDING REPORTS OF COMMITTEES OF THE COUNCIL

C. W. Colwell, M.D. (Genesee): The Reference Committee wishes to commend the work of The Council during the past year, for its untiring efforts in satisfactorily conducting the great amount of Society business, and hereby extends them a vote of appreciation for their services.

It is noted that the membership of the Society has increased again during the past year, and is now at an all-time high of 5,670.

We are pleased that the financial report reflects a situation of soundness in the financial policy and disbursement of funds.

In regard to the Journal of the Michigan State Medical Society, the Reference Committee wishes to compliment the editor and the Publication Committee for their continuing efforts in making the Michigan State Journal an outstanding publication. We agree with the policy which has been accepted by the Publication Committee relative to keeping the front page of The Journal free of advertising, and in addition we would also commend the Publication Committee for issuing the Roster Number of The Journal under separate cover.

We wish to compliment the Public Relations Committee and the Public Relations Department of the Society on the tremendous amount of work which has been accomplished during the past year.

In regard to the Woman's Auxiliary, we specifically wish to commend the President of the Auxiliary, Mrs. W. S. Stinson, for her most excellent and stimulating address to the House of Delegates. We also wish to compliment the Auxiliary as a whole for its progress and help to the medical profession during the past year, as evidenced by a considerable increase in their membership and activities.

Your Reference Committee recommends acceptance of the report on the Beaumont Memorial Restoration, deleting paragraph 3 which reads as follows: "Thanks also are extended to the Wayne County Medical Society's Beaumont Memorial Committee, headed by F. P. Rhoades, M.D., Detroit, for its work in stimulating contributions to the Beaumont Memorial Fund." It was felt by the Reference Committee that other county societies also had participated in similar programs toward the Beaumont Memorial Restoration.

In the annual reports of committees of The Council, your Reference Committee wishes to particularly commend R. W. Teed, M.D., for his committee activity on Courses in Medical Economics and Ethics.

Under matters referred to The Council by the 1953 House of Delegates, the Reference Committee wishes to reiterate the action of the 1953 House of Delegates in relation to the compulsory reporting of venereal disease.

In the recommendation of The Council, Article III, concerning the Beaumont Memorial Restoration Fund, your Reference Committee unanimously wishes to bring to your attention that although 100 per cent of the membership of several county societies have contributed to this worthy cause, the fact remains that only 42 per cent of the total membership of the Michigan State Medical Society have made this voluntary contribution.

Concerning the Supplemental Report of The Council, submitted September 27, 1954, your Reference Committee wishes to report a change in the finances associated with the Beaumont Memorial Restoration Fund. The deficit of $14,479 which had been previously reported has now been reduced by $3,472.93 due to the fact that this amount was mistakenly assessed against the Fund when it should have been deducted from the General Funds of the Society.

Mr. Speaker, I move the adoption of both the original and supplemental reports of The Council as amended, including the specific recommendations, with the exception of the article in the original report, "Needed Amendments to Bylaws" and the "Salk Polio Vaccine" article in the supplemental report which were referred to other committees by the Speaker.

F. W. Baske, M.D. (Genesee): I second the motion.

F. L. Troost, M.D. (Ingham): Mr. Speaker, last year the question of the study of the Basic Science Act was handled by a special study committee. This year I see it in the reports of The Council. I am no longer a member of that committee by my own volition, and I would be interested in knowing what results have been obtained by the amendment passed at the last legislature.

The Speaker: I might just quickly read for you comparative figures supplied by the Basic Science Board.

These are certified by waiver through August 27 of this year, and there are only three or four applications

pending: As compared with 1953, doctors of medicine from the following states: Arkansas, Colorado, Minnesota, Nebraska, Iowa, Oklahoma, Texas, South Dakota, Rhode Island and Tennessee in 1953 totaled nine physicians certified by waiver as against forty-five physicians in 1954. That is five times as many.

Osteopaths certified by waiver in 1953 were fifty-nine; in 1954 there were forty to date.

Chiropractors certified by waiver: 1953, fourteen, as against three so far this year.

Does that answer your question? (The answer was "yes.")

The motion to approve the report of The Council with the two deletions mentioned was carried unanimously.

XIII—3. ON REPORTS OF STANDING COMMITTEES

XIII—3(a). POSTGRADUATE MEDICAL EDUCATION

D. W. Thorup, M.D.: Mr. Speaker, first is the annual report of the Committee on Postgraduate Education. In reviewing this report, the Reference Committee wishes to express its approval of the subject material presented in both the extramural and intramural programs. Appreciation of the contribution from the teaching standpoint is expressed to those men who gave generously of their time and energy in this program.

The example set by the doctors of the Upper Peninsula, where 80 per cent of the practicing physicians attended the fall and spring meetings, is noteworthy and should serve as a stimulating example to the remainder of the State.

The Reference Committee wishes to echo the sentiment expressed by the Committee on Postgraduate Medical Education with regard to the loss in the passing of Dr. Edward D. Spalding.

The Reference Committee recommends the adoption of this report as presented in the Handbook.

Mr. Speaker, I so move.

F. W. Baske, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—3(b). PREVENTIVE MEDICINE COMMITTEE AND ITS SUBCOMMITTEES

The disposition of the report of this Committee is deferred until after consideration of the reports of the various subcommittees.

Annual report of the Committee on *Rheumatic Fever Control:* The report of this Committee was approved as printed in the Handbook, and the Committee is congratulated for its activity.

I move the adoption of this report.

S. L. Loupee, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

D. W. Thorup, M.D.: The annual report of the *Maternal Health Committee:* The Maternal Health Committee has been increasingly active, and we wish to express approval of the program set forth, by means of which each county medical society will be assisted in the presentation of programs dealing with the problem of maternal health. The continuation of the maternal health study as outlined in this report is recommended. The report of this Committee as printed in the Handbook is approved.

I move its adoption.

L. F. Hayes, M.D.: I second it.

(The motion was put to a vote and was carried unanimously.)

D. W. Thorup, M.D.: Annual report of the *Venereal Disease Control* Committee: The Reference Committee discussed at some length the proposal regarding substitution of 1 per cent penicillin ointment in place of 1 per cent silver nitrate as a prophylactic for the prevention of gonorrheal ophthalmia neonatorum.

Motion regarding modification of the premarital examination certificates to read, "In my opinion, the patient is free of syphilis, gonorrhea and chancroid" in place of the present wording of "venereal disease" is wholeheartedly approved by the Reference Committee.

The Reference Committee approves this report as printed in the Handbook and recommends its adoption.

I so move.

E. G. Krieg, M.D. (Wayne): Second.

(The motion was put to a vote and was carried unanimously.)

D. W. Thorup, M.D.: Annual report of the Committee on *Tuberculosis Control:* The Reference Committee noted with interest the report regarding the increasing number of available empty beds in approved tuberculosis sanatoria in Michigan.

The offer of the Executive Secretary of the Michigan Tuberculosis Association to defray expenses of speakers appearing before county medical groups was noted, and it was felt that additional publicity should be given to this generous offer.

The motion of the Tuberculosis Control Committee with regard to establishment of per diem rates was discussed at some length, and evidence was introduced at the Reference Committee hearing which indicated that further consideration of this motion was needed, in the opinion of the Reference Committee, before approval could be given the motion as printed. The Reference Committee also was influenced in this decision by the fact that two "nay" votes were recorded in the action of the Tuberculosis Control Committee.

The Reference Committee wishes to congratulate the Tuberculosis Control Committee on its activity, and moves the adoption of this report as modified.

G. T. McKean, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

The Speaker: As I understand the motion, Dr. Thorup, it is in effect that this particular matter be referred back to the Committee for further consideration before it is adopted by this House.

The motion as presented in the House should be reconsidered before it is approved by this House of Delegates; correct?

(The motion was put to a vote and was carried unanimously.)

D. W. Thorup, M.D.: Annual report of the Committee on *Industrial Health:* The interest of this Committee in closer relationship between personnel departments of industry and the practicing physician drew favorable comment from the Reference Committee. The Reference Committee moves the adoption of this report as printed in the Handbook.

Annual report of the Committee on *Mental Hygiene:* Approval of the establishment of a mental screening board was expressed by the Reference Committee. Further exploration of the problem of psychotherapy by nonmedical persons, as discussed in the Committee report, is recommended. The report of this Committee is approved by the Reference Committee, and I move its adoption as printed.

Annual report of the *Child Welfare Committee:* This report is approved as printed in the Handbook. It was the feeling of the Reference Committee that a great deal of activity was covered in relatively few words, and that the activities of this important Committee deserve commendation and support. The work of the various subcommittees on school health problems, hearing defects, and ophthalmology, are undoubtedly making great contributions to the welfare of future citizens of the State of Michigan.

I move the adoption of this report as it appears in the Handbook.

Annual report of the *Iodized Salt Committee:* The report of this Committee as it appears in the Handbook was approved by the Reference Committee. Again, it is the feeling of the Reference Committee that a great deal of activity was expressed in relatively few words.

I move the adoption of this report as printed.

Annual report of the *Geriatrics Committee:* The report of this Committee as it appears in the Handbook is approved by the Reference Committee. It was felt that the various contacts made by this Committee, notably that with approved nursing home operators throughout the State, merited approval.

I move the adoption of this report as printed in the Handbook.

Annual report of the *Preventive Medicine Committee:* The reports for the various subcommittees have been reviewed, with one exception, namely, the Cancer Control Committee, whose activity is described under the general report. This report is reviewed and approved.

I move the adoption of the annual report of the Preventive Medicine Committee as modified above, including the reports of the various committees and subcommittees as modified above.

H. J. Meier, M.D. (Branch): Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—3(c). PUBLIC RELATIONS COMMITTEE

D. W. Thorup, M.D.: In this report it is felt that it is significant to reiterate the statement that much permanent public relations activity must be carried on by county medical societies in the home community and by the doctor of medicine in his own office.

The program of 24-hour medical service as outlined in the Committee report is commendable, and its further extension is recommended.

The Michigan Health Council deserves a vote of confidence and approval in its program of M.D. procurement and placement.

The Michigan Foundation for Medical and Health Education, which supplies loan funds to students, merits the support of the members of the Society.

The program for recruitment of medical assistants, as developed by the Ingham County Medical Society, the Medical Assistants Society and the Michigan Health Council, likewise merits approval. The expenditure for and use of pamphlets meets with the approval of the Reference Committee, as do the television programs, with special reference to the program, "Court of Health."

The activity of this Committee is approved and heartily endorsed by the Reference Committee, and adoption of the report of this Committee is moved.

L. F. Hayes, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—3(d). ETHICS COMMITTEE

D. W. Thorup, M.D.: This report was approved as printed in the Handbook.

I move its adoption.

F. W. Baske, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

XIII—3(e). LEGISLATIVE COMMITTEE

D. W. Thorup, M.D.: The vigilance and guidance of this Committee in the matters brought before the State legislature is remarkable. No legislation was passed which was not approved by this Committee. The Reference Committee expresses its gratitude to the members of this Committee, and recommends the active support of each member of the House of Delegates and all members of the State Society to the activities of this Committee. The report as printed in the Handbook is approved.

I move its adoption.

R. W. Teed, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—4. ON REPORTS OF SPECIAL COMMITTEES

L. C. Carpenter, M.D. (Kent): Mr. Speaker, this consists of four committee reports. First, the Beaumont Memorial Committee report; this is on page 127 of the Handbook:

XIII—4(a). BEAUMONT MEMORIAL COMMITTEE

Your Reference Committee is fully aware of the tremendous amount of time and effort expended by the Committee, both as individuals and in Committee sessions, and wishes to give the highest praise to the Committee and especially its Chairman, Otto O. Beck, M.D., for realizing the completion of this beautiful Memorial.

Your Reference Committee further supports the recommendation of The Council, and urges the individual delegates, upon returning to their respective county societies, to stress the need for further financial support of this project by those who have not made contributions to date.

I move the acceptance of this portion of the report.

H. F. Falls, M.D. (Washtenaw): Second.

(The motion was put to a vote and was carried unanimously.)

L. C. Carpenter, M.D.: The second report is that of the Scientific Radio Committee, on page 129 of the Handbook.

XIII—4(b). SCIENTIFIC RADIO COMMITTEE

Your Reference Committee congratulates the Scientific Radio Committee for the thoroughness of coverage and the excellence of the forty programs presented. Your Reference Committee suggests that in the future the names of those doctors participating in the program be printed in the annual report of the Committee so that those individuals can be given credit for their time and effort in making these important programs a success.

I move the acceptance of this portion of the report.

J. M. Wellman, M.D. (Ingham): Second the motion.

(The motion was put to a vote and was carried unanimously.)

L. C. Carpenter, M.D.: The third report was that of the Advisory Committee to the Woman's Auxiliary.

XIII—4(c). ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

Your Reference Committee approves the report of this Committee as printed on page 130 of the Handbook, and wishes to compliment the Auxiliary on the success of its many-faceted program and to give special praise to the organization's competent President, Mrs. Walter S. Stinson.

I move the acceptance of this portion of the report.

C. W. Oakes, M.D. (Huron): Second the motion.

(The motion was put to a vote and was carried unanimously.)

L. C. Carpenter, M.D.: The fourth report is that of the Advisory Committee to the Michigan State Medical Assistants Society.

XIII—4(d). ADVISORY COMMITTEE TO MSMAS

Your Reference Committee approves the report of this Committee as printed on page 131 of the Handbook, and the supplemental report as presented to the House this afternoon, and wishes to commend the Committee for the role it has played in the expansion of this very important group.

I move the acceptance of this portion of the report.

R. W. Teed, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

L. C. Carpenter, M.D.: Mr. Speaker, I move the acceptance of this report of the Reference Committee as a whole.

H. F. Falls, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—5. ON CONSTITUTION AND BY-LAWS

C. K. Hasley, M.D. (Wayne): If you will turn to your Handbook on page 141, you will have the chapters which we dealt with. First, Chapter 5 on Membership Classification:

Amendment to Chapter 5, Section 3, which was read by Dr. Johnson, the Reference Committee has adopted. It reads as follows:

XIII—5(a). CHAP. 5, SEC. 3-f

"Chapter 5, Section 3, paragraph (f): An active member, by transfer, for the period of time he is temporarily out of active practice on account of protracted illness, provided his dues are paid for the year previous to the onset of illness."

Mr. Speaker, I move the adoption of this part of the report.

F. W. Baske, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

C. K. Hasley, M.D.: The second portion was Chapter 5, Section 3, paragraph (g). It was amended to read as follows:

XIII—5(b). CHAP. 5, SEC. 3-g

"An active member, by transfer, for the period of one year while he is temporarily out of practice on account of postgraduate medical studies. This may be renewed upon petition to The Council at its discretion, provided his membership dues are paid to the end of the preceding calendar year."

Mr. Speaker, I move adoption of this portion of the report.

Otto O. Beck, M.D. (Oakland): I second the motion.

(The motion was put to a vote and was carried unanimously.)

C. K. Hasley, M.D.: Chapter 5, Section 4, was amended to read as follows:

XIII—5(c). CHAP. 5, SEC. 4

"A member who has maintained membership in a component county society of this State Society for a period of ten or more years, and having retired from practice, may be transferred to the retired members' roster, provided his membership dues are paid to the end of the preceding calendar year." The balance of this section will remain the same.

Mr. Speaker, I move adoption of this portion of the report.

R. W. Teed, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

XIII—5(d). CHAP. 5, SEC. 5

C. K. Hasley, M.D.: The next portion was a proposed amendment to Chapter 5 which the Reference Committee felt was a little bit confusing, and consequently it was rejected. The Reference Committee rejected it because they felt that the interpretation of the paragraphs would be confusing, and this particular portion was already covered by the Bylaws. Consequently, the Reference Committee recommends that Chapter 5, Section 5 stand as now printed in the Handbook.

The Speaker: Are you ready for the question?

(The motion was put to a vote and was carried unanimously.)

XIII—5(e). CHAP. 5, SEC. 8

C. K. Hasley, M.D. Next is Chapter 5, Section 8. The Committee felt that the words "only active members are eligible to" should be deleted in the beginning of the paragraph, and it is proposed that the paragraph shall start and read: "For retired or life membership, the component county medical society," and so on.

Mr. Speaker, I move the adoption of this portion of the report.

R. W. Teed, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

XIII—5(f). CHAP. 6, SEC. 6

C. K. Hasley, M.D.: We recommend the adoption of the proposed amendment to Chapter 6, Section 6, as provided in Section 5, instead of Section 3. This is apparently a typographical error.

XIII—5(g). CHAP. 15, SEC. 2

C. K. Hasley, M.D.: Chapter 15, Section 2, the committee recommends the proposed addition to Section 2. This section should read as follows: "Any member in arrears after April 1 of each official year shall stand suspended until his name is properly recorded and his dues and assessments for the current year properly remitted, unless his name is to be submitted for election to one of the special memberships listed in Chapter 5 at the next succeeding annual session of the House of Delegates."

XIII—5(h). RESOLUTION RE CHANGE IN NAME OF MENTAL HYGIENE COMMITTEE —CHAP. 10, SEC. 3

C. K. Hasley, M.D.: Two resolutions were introduced covering a change in name of The Mental Hygiene Committee. It was felt by the Reference Committee that if a composite resolution were drawn and substituted for the two, it probably would be all right. The resolution was changed to the following, which I think is self-explanatory:

"WHEREAS, the American Medical Association designates its committee concerned with mental health and mental hygiene problems as the Committee on Mental Health, and

"WHEREAS, it is in the interests of unity of function and title that similar committees of state medical societies be so designated, and

"WHEREAS, the Mental Hygiene Committee of the Michigan State Medical Society at its meeting of April 21, 1954, adopted a motion to the effect that the name should be changed to the 'Committee on Mental Health,' and

"WHEREAS, this recommendation was referred and approved by the Executive Council of the Michigan State Medical Society on May 9, 1954; therefore, be it

"RESOLVED: That the Bylaws of the Michigan State Medical Society, Chapter X, Section 3, be changed

to read: 'Committee on Mental Health' in lieu of 'Committee on Mental Hygiene.' "

I move adoption of this portion of the report.

P. E. Sutton, M.D. (Oakland): Second the motion.

(The motion was put to a vote and was carried unanimously.)

C. K. Hasley, M.D.: Mr. Speaker, at this time I wish to take this opportunity to thank Dr. Foster and Dr. Slagle for helping us in the deliberations of this Reference Committee, and also the Committeemen for the work they have done.

XIII—5(i). CHAP. 8, SEC. 1

C. K. Hasley, M.D.: *Chapter 8, Section 1:* We recommend the adoption of the amendment as proposed. The revised section should read in part, ". . . one delegate for each fifty voting members, active, life and retired, and one delegate for each additional major fraction thereof."

The Speaker: We will now accept a motion to approve the amendment to Chapter 8, Section 1, as Dr. Hasley has just read it. Is there a second to that motion?

R. A. Johnson, M.D.: I second the motion.

(The motion was carried unanimously.)

C. K. Hasley, M.D.: I move the adoption of the report as a whole.

C. I. Owen, M.D. (Wayne): Second.

(The motion was put to a vote and was carried unanimously.)

XIII—6. REFERENCE COMMITTEE ON RESOLUTIONS

XIII—6(a). RESOLUTION RE HOSPITAL STAFFS' STUDY OF MHS UTILIZATION

O. J. Johnson, M.D.: The resolution introduced by Dr. Reveno of Wayne relative to the appointment of proper utilization of hospital services committees by each participating hospital: The Reference Committee recommends the adoption of this resolution, and I so move.

J. M. Wellman, M.D.: Second.

The Speaker: Are you ready to vote on the motion?

(The motion was put to a vote and was lost.)

The Speaker: The motion is lost.

XIII—6(b). RESOLUTION RE EXPANSION OF AMA ADMINISTRATIVE FACILITIES

O. J. Johnson, M.D.: The next resolution was relative to the expansion of administrative and fact-finding facilities at AMA headquarters, and the appointment of a committee by the Board of Trustees to study these problems.

Your Reference Committee recommends the adoption of this resolution.

I so move.

E. G. Krieg, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—6(c). RESOLUTION RE EXTENSION OF MSMS PERIODIC HEALTH APPRAISAL PROGRAM

O. J. Johnson, M.D.: The next resolution was relative to the individual members of the House of Delegates stimulating periodic health appraisals. The Reference Committee recommends the adoption of this resolution.

I so move.

A. B. Gwinn, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—6(d). RESOLUTION RE PERIODIC HEALTH EXAMINATION BY HOSPITAL STAFFS

O. J. Johnson, M.D.: The next resolution was relative to hospital staffs conducting periodical examinations. The Reference Committee recommends that this resolution be referred to The Council for referral to the proper committee for study and report.

I so move.

E. G. Krieg, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

XIII—6(e). RESOLUTION RE PUBLIC RELATIONS FUNDS

O. J. Johnson, M.D.: The next resolution was relative to the return of 50 per cent of the public relations money paid in by the counties on request. The Reference Committee recommends the disapproval of this resolution, with the following comment:

1. It has not been demonstrated that the need for this amount of money for public relations in the State Society has lessened.

2. Avenues exist for county societies to obtain aid for public relations programs from the Michigan State Medical Society through The Council (see page 73 of the Handbook).

I move the adoption of this portion of the Reference Committee's report.

The Speaker: The motion is to disapprove.

O. B. McGilliguddy, M.D. (Ingham): Second.

(The motion was put to a vote and was carried unanimously.)

O. J. Johnson, M.D.: I move the adoption of the report as a whole, as amended.

L. F. Hayes, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

The Speaker: Mr. Vice Speaker, will you take the Chair, please.

(Vice Speaker Johnson resumed the Chair.)

XIII—7. ON SPECIAL MEMBERSHIPS

Vice Speaker Johnson: The report of the *Reference Committee on Special Memberships.*

C. I. Owen, M.D.: Mr. Chairman and members of the House of Delegates, I will try to shorten this by reading the names of the doctors, the county from which each comes, and the membership to which each is recommended.

XIII—7(a). SPECIAL MEMBERS—M.D.'S

The first is from Ingham County. Dr. Ray A. Pinkham is recommended for retired membership.

Dr. F. L. Rector, now living in Evanston, Illinois, is recommended for retired membership.

Ingham County recommends Dr. A. G. Stanka of Grand Ledge for life membership. He has been in practice over 45 years and is now 75 years of age.

We now have from Wayne County a group of physicians recommended for retired membership. These are physicians who have actually retired from active practice and fulfill all requirements: Dr. Don Bailey; Dr. G. C. Chostner; Dr. Frederick J. Eakins, and Dr. Robert B. Kennedy.

Next is a recommendation from Wayne County for life membership: Drs. Ralph Bookmyer; R. John Hardstaff; David Littlejohn; J. Milton Robb; William S. Summers; Jacob S. Wendel, and C. Stuart Wilson.

The following are recommended for associate members from Wayne County, and these men are temporarily out of practice due to illness or postgraduate medical studies: Drs. Peter M. Agnone; C. A. Cetlinski; I. J. Kurtz; Howard N. Manz; Donald W. Schiff, and Foster D. Scruton.

From Jackson County, Dr. Leland Sargent is recommended for associate membership.

From Jackson County, Dr. Guy Culver is recommended for associate membership.

From Delta-Schoolcraft County Medical Society, Dr. A. H. Miller of Gladstone is recommended for life membership.

From Lapeer County, Dr. Clarence D. Chapin of Columbiaville is recommended for life membership. He has practiced continuously in Lapeer County for fifty years.

Calhoun County: Dr. Wendell H. Stadle is recommended for retired membership.

Calhoun County: Dr. A. M. Giddings of Battle Creek is recommended for life membership.

Calhoun County: Dr. W. B. Lewis of Battle Creek is recommended for life membership.

Ottawa County: Dr. Robert Michmerhuizen, a victim of poliomyelitis, is recommended for a continuation of his associate membership.

St. Clair County: Dr. Charles F. Thomas is recommended for retired membership on account of disabling illness.

Marquette-Alger County: Dr. Frank O. Paull, of Marquette, is recommended for retired membership.

Dickinson-Iron County: Dr. Geron Fredrickson is recommended for retired membership.

Muskegon County: Dr. John Heneveld is recommended for retired membership.

Oakland County: Dr. George C. Hardy of Rochester, Michigan, is recommended for life membership.

Oakland County: Dr. Robert B. Hasner of Royal Oak is recommended for life membership.

Oakland County: Dr. Clarence L. Hathaway of Lake Orion is recommended for life membership.

Saginaw County: Dr. Lloyd A. Campbell and Dr. U. S. Bagley are recommended for retired membership. Both of them have given up the practice of medicine because of ill health.

North Central Medical Society: Dr. F. A. Forney of Gaylord is recommended for life membership.

Mr. Chairman, the Reference Committee recommends the election of the previously named doctors to the respective memberships.

I so move.

F. P. Rhoades, M.D. (Wayne): Second the motion.

(The motion was put to a vote and was carried unanimously.)

C. I. Owen, M.D.: Mr. Chairman, I would like to say that I believe there are a number of recommendations for memberships that have not yet been put in resolution form and given to me. I think some of the counties believe that all that is required is that they write to the State Medical Society. That is not sufficient.

When you write to the State Society you only put the office on guard. In addition, you must give to me or turn in to the Secretary three copies of the resolutions on the doctors and the type of membership and the circumstance of the case.

I think there are quite a few missing, from what I have seen of the correspondence. If you give them to me tonight or the first thing in the morning, we will work on them.

We now have a recommendation for an honorary membership. This is presented by the Genesee County Medical Society:

XIII—7(b). HONORARY MEMBERSHIP TO DONALD E. JOHNSON

"WHEREAS, Mr. Donald E. Johnson of Flint has rendered distinguished services to medicine in his outstanding work in the lay cancer field, and

"WHEREAS, Mr. Johnson has given unstintingly of his time and resources to further research in cancer, to provide professional and lay education, and to stimulate public interest in the cancer problem, and

"WHEREAS, he has solely financed the Genesee County Annual Cancer Day which after ten years has become one of the outstanding cancer programs in the country, and

"WHEREAS, he has been honored nationally by being given an executive appointment as a Director of the National Research Cancer Center in Bethesda, Maryland, as well as being elected a National Director of the American Cancer Society, and

"WHEREAS, he is an Honorary Member of the Genesee County Medical Society and The Michigan State Medical Society Bylaws, Chapter V, Section 2, provide for Honorary Membership in MSMS; therefore, be it

"RESOLVED: That Mr. Donald E. Johnson be awarded honorary membership in the Michigan State Medical Society."

The Reference Committee recommends the election of Mr. Johnson to honorary membership.

I so move.

L. M. Bogart, M.D.: Second the motion.

(The motion was put to a standing vote, and was carried unanimously.)

C. I. Owen, M.D.: Mr. Speaker and fellow delegates, we have an application from Dickinson-Iron County Medical Society to grant *Dr. George H. Boyce, of Iron Mountain, Life Membership.* He fulfills all requirements.

We have an application from Washtenaw County, to grant *Dr. William I. Bauer Associate Membership.* We have a whole list of names here from Washtenaw County.

We have an application from Lenawee County to grant *A. P. Rawson, M.D., Non-Resident membership.*

I move these men be granted this membership.

The Speaker: It is moved that the special memberships just read to you be granted.

H. F. Falls, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

C. I. Owen, M.D.: Again may I thank the members of the Reference Committee who served me. I also want to thank Dr. Livesay, Dr. Foster and the office staff, who did a lot of work, and especially Bob Roney.

Mr. Chairman, I move the report of the Reference Committee be accepted as a whole.

F. P. Rhoades, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—8. ON LEGISLATION AND PUBLIC RELATIONS

Vice Chairman Johnson: The report of the *Reference Committee* on *Legislation and Public Relations.*

XIII—8(a). RESOLUTION RE TRAFFIC SAFETY

H. J. Meier, M.D.: Mr. Chairman, the Reference Committee on Legislation and Public Relations reviewed the resolution re traffic safety and present the following amendment thereto:

"WHEREAS, Michigan doctors of medicine have a responsibility for supporting all efforts to prevent sickness and accidents, and

"WHEREAS, the 1953 Michigan traffic toll of 1,925 fatalities and 57,300 persons injured represents a human and economic waste which is intolerable and largely unnecessary, and

"WHEREAS, the Michigan State Safety Commission and the Michigan Traffic Safety Federation have rendered invaluable service in pointing the way toward possible solutions of this problem, and

"WHEREAS, the problem of traffic accident prevention has broad public relations possibilities and that a major effort in the State is being made in the field of traffic safety without an organized program from the doctors of medicine; therefore, be it

"RESOLVED: That this House of Delegates strongly urge the Michigan State Safety Commission and the Michigan Traffic Safety Federation to redouble their

efforts toward creating a lower highway accident rate for Michigan; and be it also

"RESOLVED: That the recommendation of the Michigan Highway Safety Seminar of January, 1954, calling for increased numbers of State police, receive our specific support; and be it also

"RESOLVED: That individual members of the Michigan State Medical Society, by way of the Secretary's Letter, be urged to acquaint themselves with the fact of the presence or absence of driver training programs in the schools of their respective communities and, where such a program does not exist, to strongly urge its initiation; and be it further

"RESOLVED: That the House of Delegates instruct the President of the Michigan State Medical Society to appoint a committee to study traffic accident prevention in the State of Michigan."

Mr. Chairman, I move that the resolution as amended and as just read, be adopted.

L. F. Hayes, M.D.: I second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—9. ON HYGIENE AND PUBLIC HEALTH

Vice Speaker Johnson: **The report of the Reference Committee on Hygiene and Public Health.**

J. G. Molner, M.D. (Wayne): Mr. Chairman and members of the House of Delegates:

XIII—9(a). RESOLUTION RE STATEMENT OF COUNCIL ON SALK POLIO VACCINE

The first item which we would like to speak of was a supplemental report by Dr. Bromme this morning, for The Council, entitled, "Statement of The Council, MSMS, on Salk Polio Vaccine." This report was a rather lengthy report. Your Reference Committee considered it very carefully, and unanimously agrees that the Executive Committee of The Council be commended on their stand, and that the report bear the endorsement of this body.

I so move.

F. P. Rhoades, M.D.: Second the motion.

Voice: What was the stand?

J. G. Molner, M.D.: Mr. Chairman, the stand was two pages long. I might brief for you one of the first basic questions which The Council took exception to, or rather the Executive Committee of The Council.

The question was asked, "Is this vaccine safe?" At that particular time no answer was forthcoming from the National Foundation for Infantile Paralysis nor from the National Institute of Health.

The second question was, "Is this vaccine potent?" According to the report of the Executive Committee, there was no answer forthcoming on this; as a matter of fact, in the published report by Dr. Salk it was rather apparent that he himself at that time questioned the potency of the vaccine.

The third basic question was, "Who will accept the responsibility in the event there is an accident in the administration of this vaccine?"

Some time later the National Foundation for Infantile Paralysis said that they had taken out a rather large public liability policy, and they would stand good for any such accidents.

Actually, the Executive Committee felt that the National Foundation for Infantile Paralysis did not feel particularly firm in their belief that the vaccine was absolutely safe by not saying that it was safe, and by taking out this rather large public liability policy.

I might read from the statement: "The Executive Committee was in unanimous agreement. It utilized the informational media of this day to indicate to those who would hear that 'The MSMS will not withhold approval from the experiment on children by mass inoculation of the Salk poliomyelitis vaccine as proposed by the National Foundation for Infantile Paralysis, and we will defer to the decision of the State Health Commissioner."

Vice Speaker Johnson: Not only as an order of business which is proper, but also out of courtesy to your Vice Speaker, will those who may wish to discuss this motion please step to the nearest microphone and give their name and the county from which they come? Is there further discussion?

F. L. Troost, M.D.: There is something that I feel called upon to say.

In Dr. Brome's report this morning it was pointed out that in yesterday's meeting of The Council all of The Councilors except one, namely, Dr. Robert Breakey, Councilor of the Second District, approved this action.

I now want to point out to this House that in so doing Dr. Breakey brought forth the sentiments of at least one of the counties of his Councilor District, namely Ingham County.

When the report was made to the people of the State of Michigan, the doctors of Ingham County were greatly upset by the report. A meeting of our Society followed shortly afterward, and three different resolutions were prepared for presentation to The Council. The mildest one was sent.

In that resolution it pointed out that we were disappointed by the indecisive stand of The Council and by the confusion that it had caused in the minds of our people. Many of us received at least fifty calls the following day, and the people said, "What do you doctors stand for?" Many people cancelled their appointments for their children following the calls.

I say in defense of Dr. Breakey's stand that he took the stand taken by his own County Medical Society.

Vice Speaker Johnson: Is there any further discussion of the motion to approve the Reference Committee's report?

(The motion was put to a vote and was carried.)

XIII—9(b). RESOLUTION RE MIGRANT WORKERS

J. G. Molner, M.D.: The resolution submitted by the Ottawa County Medical Society concerning the health and environmental problems of migrant workers. Your Reference Committee begs to call to your attention the fact that a similar resolution was passed by your honorable body in 1953. Further, we beg to call to your attention the fact that E. F. Sladek, M.D., presently heads up a committee, namely, the Migrant Workers' Study Committee, and in view of these facts your Reference Committee makes the following recommendation:

We recommend the adoption of an amended resolution as follows:

"RESOLVED: That every effort be made to explore all possibilities of health screening procedures of all migrant workers—first, and most important, by their employers; secondly, if such procedures fail, that the Committee explore with the State Health Commissioner and the U. S. Public Health Service the possibilities of implementing such screening procedures through legal action."

I move the adoption of this resolution, Mr. Chairman, with the above amendment.

O. K. Engelke, M.D.: I second it.

(The motion was put to a vote and was carried unanimously.)

J. G. Molner, M.D.: I move the adoption of the report as a whole.

R. W. Teed, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—10. ON MISCELLANEOUS BUSINESS
XIII—10(a). RESOLUTION RE PANEL ON UNDERGRADUATE MEDICAL EDUCATION

O. B. McGillicuddy, M.D. Mr. Speaker and delegates, I have a resolution. The Reference Committee changed the "Resolved" slightly, and the resolution now reads as follows:

"WHEREAS, there is a constant growing interest in medical education on the part of our profession and the general public, and

"WHEREAS, there is a continually growing need for more physicians to serve an ever increasing population, and

"WHEREAS, there is great need that we, as physicians, become better informed as to present facilities and future plans for incerase in these facilities to meet this growing need; therefore, be it

"RESOLVED: That The Council of the Michigan State Medical Society arrange with the deans of our two medical schools for a panel discussion on undergraduate medical education. This panel discussion is to be a part of the program of a State meeting of the MSMS at some early future date.

Mr. Speaker, I move the adoption of this resolution.

S. L. Loupee, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—11. ON EMERGENCY MEDICAL SERVICE

The Speaker: Report of the Reference Committee on Emergency Medical Service.

XIII—11(a). RESOLUTION RE COUNTY MEDICAL SOCIETY'S RESPONSIBILITY IN MEDICAL CIVIL DEFENSE

C. E. Umphrey, M.D. (Wayne): Mr. Speaker, this Reference Committee dealt with a resolution from the Wayne County Medical Society. The only changes that were made were in the "Resolved," which I shall read as changed:

"RESOLVED: That this House of Delegates, realizing the urgency, directs each constituent society to assume its responsibility and organize immediately a medical civil defense program in support of the State plan; that each member of The Council accept the responsibility for urging compliance with this resolution."

Your Reference Committee realizes the possibility and gravity of an atomic catastrophe, and wishes to express its appreciation to the Committee on Emergency Medical Service for their valuable contribution.

As Chairman, therefore, I move the adoption of this resolution as amended.

J. E. Hauser, M.D. (Wayne): Second the motion.

(The motion was put to a vote and was carried unanimously.)

C. E. Umphrey, M.D.: I move the adoption of the report as a whole.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

We stand adjourned.

(The meeting adjourned at 10:15 p.m.)

TUESDAY MORNING SESSION

September 28, 1954

The meeting reconvened at 9:50 a.m., J. E. Livesay, M.D., Speaker of the House of Delegates, presiding.

The Speaker: We are aware that many guests will be here with us during this session, and tonight we will try to introduce all those we know to be present. However, this morning Dr. Howard Schriver is with us, from Cincinnati. Dr. Schriver is President of the National Blue Shield Commission.

XIII—SUPPLEMENTAL REPORTS OF REFERENCE COMMITTEES

XIII.—6(f). RESOLUTION RE COMMENDATION OF STATE HEALTH COMMISSIONER

O. J. Johnson, M.D.: Mr. Speaker, Dr. McKean introduced a resolution last night relative to Dr. Albert Heustis, State Health Commissioner. After lengthy discussion by visitors and several members of The Council, the Reference Committee wishes to submit this substitute resolution:

"WHEREAS, Albert E. Heustis, M.D., as Commissioner of Health of the State of Michigan, has brought enthusiasm and vigor to the discharge of his duties, and

"WHEREAS, Dr. Heustis has shown by the conduct of his office that the safeguarding of the public health of the people of the State of Michigan will be prosecuted with energy and dispatch; therefore, be it

"RESOLVED: That the House of Delegates of the MSMS extend to Dr. Heustis their hope that his services will continue to be available at the time of his consideration for reappointment."

I move the adoption of this resolution.

L. J. Bailey, M.D.: Second the motion.

J. R. Rodger, M.D..: May I point out that that resolution will be of no value whatsoever unless a copy is sent to the Governor.

L. J. Bailey, M.D.: May I reword the amendment: That a copy of this resolution be sent to the Governor of the State of Michigan after January 1, 1955.

R. W. Teed, M.D.: I will second that.

The Speaker: We are now voting on the amendment.

(The amendment was put to a vote and was carried unanimously.)

(The motion as amended was put to a vote and was carried unanimously.)

O. J. Johnson, M.D.: Since that was the only business we conducted, this concludes our report.

XIII.—8(b). RESOLUTION RE GREATER UNIFORMITY BY BASIC SCIENCE BOARDS

H. J. Meier, M.D..: Mr. Speaker, the Reference Committee on Legislation and Public Relations convened with all members present. We reviewed the resolution relative to the basic science question as presentd by Dr. Fryfogle of Wayne County.

Because the Study Committee appointed by The Council has undertaken to answer the problems presented by this resolution, and because information is now available that shows the amendments to the basic science law are accomplishing what they were meant to accomplish, and because it is better to implement this program by painstaking study, our Reference Committee recommends that this resolution be referred to the Special Committee for the Study of Basic Science.

Mr. Speaker, I move the adoption of this report.

E. S. Parmenter, M.D. (Alpena-Alcona-Presque Isle): I second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—12. ON MEDICAL SERVICE AND PREPAYMENT INSURANCE

Otto O. Beck, M.D.: Mr. Speaker, your Reference Committee had seven resolutions presented to it. The first resolutions that I shall present deal with the assistant's fee problem. There are two resolutions on this matter, and they were considered together by your Reference Committee.

XIII—12(a). RESOLUTION RE SURGICAL ASSISTANTS' FEES (JOHNSON)

The first resolution by O. J. Johnson, M.D., states:

"RESOLVED: That the House of Delegates of MSMS recommend to Michigan Medical Service that it pay surgical fees to the operating surgeon and to the attending physician who was actually and in person aided in the care of the patient, in amounts as specified by and the fee requested by the operating surgeon."

XIII—12(b). RESOLUTION RE SURGICAL ASSISTANTS' FEES (FENTON)

The other resolution by R. F. Fenton, M.D., stated:

"RESOLVED: That this House of Delegates petition the Medical Blue Shield to consider their action in this regard, and attempt to work out a provision whereby in those hospitals having no or insufficient number of residents and interns, and upon the request of the operating surgeon, a fair and equitable fee shall be paid to the family physician assisting in the case."

The action of the Reference Committee is as follows: Since resolutions No. 9 and No. 11 are in the same tenor, the Reference Committee recommends that both resolutions as presented be rejected, and the substitute resolution which follows, covering the intent of both resolutions Nos. 9 and 11, be adopted by the House of Delegates. The substitute resolution follows:

"RESOLVED: That the House of Delegates of the Michigan State Medical Society recommends to Michigan Medical Service that it develop procedures to pay surgical fees to the operating surgeon and the assisting physician who has actually and in person assisted at the surgical operation on the patient when and if requested by the operating surgeon."

Mr. Speaker, I move that this recommendation be adopted.

W. S. Stinson, M.D. (Bay City): Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII.—12(c). RESOLUTION RE STUDY OF ANESTHESIA FEES BY INSURANCE COMPANIES AND MMS

Otto O. Beck, M.D.: The next resolution deals with the payment of a fee for anesthetics:

"WHEREAS, more doctors of medicine are devoting time to anesthesiology, and

"WHEREAS, the present fee schedules of the insurance companies for anesthetics in many cases are inadequate for the time and skill involved, and

"WHEREAS, the Michigan Medical Service did not increase their fee for this service with the revision of other fees; therefore, be it

"RESOLVED: That the House of Delegates request of the insurance companies a study of the question of anesthetics, with a view to revising upward the present fee schedules, making them more adequate for the services rendered by doctors of medicine; and be it further

"RESOLVED: That the House of Delegates recommends to Michigan Medical Service that their fees for anesthetics be increased for the same reason."

The action of the Reference Committee is as follows:

The Reference Committee recommends that the two "resolveds" regarding revision of the anesthesia fee schedule be disapproved, for the reason that to make such a request from an insurance company would be impractical, but that the second "resolved" be called to the attention of the Medical Advisory Committee to Michigan Medical Service without recommendation.

Mr. Speaker, I move the action of the Reference Committee.

J. R. Heidenreich, M.D. (Menominee): I second the motion.

The Speaker: Are you ready for the question?

(The motion was put to a vote and was carried unanimously.)

XIII—12(d). RESOLUTION RE HOME-TOWN MEDICAL CARE PROGRAM (VA)

Otto O. Beck, M.D.: The next resolution pertains to the veterans care program. The resolution reads as follows:

"WHEREAS, the veterans' care program under the Michigan Medical Service does not become operative until after a request for authorization has been received from the private physician, and

"WHEREAS, the disability is frequently cured prior to receipt of such authorization, and

"WHEREAS, the greatest majority of disabilities are not service-connected and could be financially met by personal means of most such afflicted veterans, and

"WHEREAS, serious chronic disabilities might be better cared for in a veterans' facility; be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society request the Michigan Medical Service to discontinue the veterans' care program."

The action of the Reference Committee was as follows: The Reference Committee recommends that the resolutions requesting the discontinuance of medical service to the veterans' care program be disapproved for the reasons given as follows:

1. The present veterans' plan of Michigan Medical Service care is enthusiastically supported by the veterans' organizations throughout the states, and by a great majority of the veterans involved.
2. Because it is looked upon as a model solution for ambulatory treatment for service-connected disabilities by the Veterans Administration in Washington and has been received with hearty cooperation by a majority of the doctors of the State.
3. Because this program has been a heartening demonstration of the veterans favoring private medical care versus government medical care.

Mr. Speaker, I move the resolution be adopted.

F. W. Baske, M.D.: Second the motion.

The Speaker: The motion on the floor is to disapprove this motion. Are you ready for the question?

(The motion was put to a vote and was carried, Drs. Teed and Bogart voting "no.")

The Speaker: The resolution is disapproved. The motion was carried.

XIII—12(e). RESOLUTION RE LIBERALIZATION OF BLUE SHIELD BENEFITS

Otto O. Beck, M.D.: The next resolution states:

"WHEREAS, the development and subsequent improvement of a voluntary health insurance program has been a primary interest of the Michigan State Medical Society, and

"WHEREAS, the broadening of benefits of such a program to include realistic protection against the medical costs of all illness, medical as well as surgical, is an essential in the further improvement of such a program, and

"WHEREAS, consultations are a recognized vital need for the proper care of some hospitalized patients, and

"WHEREAS, services rendered medical patients vary widely with the nature of the medical problems presented, so that unusual time and/or skill may be necessary for their proper care; therefore, be it

"RESOLVED: That the Grand Traverse-Leelanau-Benzie County Medical Society does hereby resolve that a recommendation for the following changes in the benefits of the Michigan Medical Service, the Blue Shield Plan, be respectfully submitted to the House of Delegates of the Michigan State Medical Society at the next annual meeting, for transmittal to the Board of Directors of Michigan Medical Service:

"1. Provision for coverage in total, or part, of medical and/or surgical consultation fees for services necessary for the proper care of hospitalized patients, just as the

plan now covers similar fees for x-rays, laboratory, and pathological consultative services.

"2. Increase of prevailing benefits for medical services to cover unusual services incident to the care of medical cases, on a schedule of benefits that will compensate for the varying amounts of time and skill that are necessary in caring for the various medical problems, just as the schedule of benefits now does for the various surgical procedures."

Your Reference Committee recommends that the resolution be disapproved on the grounds that item 2, covering unusual services, is already provided for by Michigan Medical Service by an appeal to the Medical Advisory Committee of Michigan Medical Service. Second, that the problem of consultants, as to their qualifications and necessity for, and the abuse to which this could be put, has been investigated since the inception of Michigan Medical Service and has been found unacceptable.

Mr. Speaker, I move approval of this report of the Reference Committee.

THE SPEAKER: The motion is to disapprove.

G. T. McKEAN, M.D.: I second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII.—12(f). RESOLUTION RE REVISION OF BLUE SHIELD FEE SCHEDULE

OTTO O. BECK, M.D.: The next resolution:

"WHEREAS, the doctors and hospitals of Michigan have been faced with rising costs for the past several years, and the hospitals have had several increases in their Blue Cross schedules, and

"WHEREAS, the doctors of Michigan have had several adjustments in the fee schedule not commensurate with the general rise in the cost of living and not commensurate with fees paid to doctors by some other insurance companies, and

"WHEREAS, there are inequities in the fee schedule concerning several branches of medicine, including radiology and anesthesia; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society recommend to the Board of Directors of Michigan Medical Service that it study and revise its fee schedule to be consonant with the economic realities of the present time."

The Reference Committee recommends that this resolution be disapproved because (1) the fee schedules are based on income level limits which have not changed since the inception of the plans; (2) an increase in fee schedules would, of necessity, be predicated on the development of another plan on a higher income level; (3) the Hospital Coverage Plan has no income level limits and is based on hospital costs.

Mr. Speaker, I move approval of the recommendation of the Reference Committee.

E. A. OAKES, M.D.: Second the motion.

THE SPEAKER: Is there further discussion of the motion on the floor? Would you like to hear the motion again? The motion is to disapprove. Those in favor will say "aye"; opposed, "no." I believe the "ayes" have it. The motion is carried and the resolution is disapproved.

XIII—12(g). RESOLUTION RE DIVISION OF FEES

OTTO O. BECK, M.D.: The next resolution deals with the legality of the division of fees.

"WHEREAS, there exists considerable confusion regarding (1) legality (2) ethics of division or apportionment of fees which is often called fee-splitting, and

"WHEREAS, the House of Delegates of the American Medical Association at their meeting in San Francisco in June, 1954, adopted the report of the Judicial Council, which deems ethical the practice of combined billing to (1) nonprofit insurance companies; (2) patients who so request, provided that (1) the bills are itemized as to each physician's service and fee, (2) separate checks are rendered in payment, and

"WHEREAS, legal opinion given to the Michigan Medical Service and conveyed to The Council of the Michigan State Medical Society further confuses the issue by stating in paragraph I that apportionment of fees is illegal under the laws of Michigan, but in paragraphs II and III state that plans whereby a surgeon receives a lesser fee for less service or a physician receives compensation for services rendered is not considered apportionment of fees, and

"WHEREAS, the legality of the issue in the State of Michigan seems to depend upon whether the medical fraternity considers the practice ethical; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society, now in session, be allowed to vote, by ballot, without referring the matter to committee, on the following question: 'Is the division of fees considered ethical if the following criteria are observed? (1) The billing is clearly understood by the patient and participating physicians. (2) Is rendered in adequately itemized form. (3) Wherein the apportionment is commensurate with services rendered by each physician, (4) For which payment is rendered separately.' "

The Reference Committee recommends that the resolution be disapproved, as it was based upon a misunderstanding as to the meaning of apportionment versus payment for services actually rendered; and that the Reference Committee recommends that The Council of the Michigan State Medical Society clarify the problem.

Mr. Speaker, I move the adoption of this section of the report.

R. W. TEED, M.D.: Second.

(The motion was put to a vote and was carried unanimously.)

OTTO O. BECK, M.D.: Mr. Speaker, I move the adoption of the report as a whole.

H. J. MEIER, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

THE SPEAKER: I believe there are no other reports of reference committees to be brought in at this time. With your permission, we will revert to item 25, new business. Dr. Owen.

XIV. NEW BUSINESS

XIV—1. CERTIFICATION OF ASSOCIATE MEMBERS

C. I. OWEN, M.D.: Mr. Speaker, little did I realize that a Committee on Special Memberships could get so involved, but in talking it over with the Secretary and the Speaker of the House it was decided to save time in the future at annual meetings we could obviate some of the voting on associate members and that interns or residents can become associate members. Heretofore it has been necessary that this House vote individually on associate members upon recommendation of the county societies.

It is proposed that this formality be dispensed with, and in order to do that the Bylaws must be amended. This is the amendment proposed. This was written hurriedly, and I hope the Reference Committee will polish it up a bit.

If you will turn in your Handbook to the Bylaws, Chapter V, Section 3, part B which deals with interns and residents, we will add one sentence. We are proposing to add one sentence at the end of part B as follows:

"Such intern or resident, when certified to the Michigan State Medical Society Secretary by his component county society as an associate member, becomes an associate member of the Michigan State Medical Society

without action of the House of Delegates, provided the county society files formal application with the State Society Secretary."

This means that in large centers, such as Detroit and Ann Arbor, where there are a large number of interns and residents, all that is necessary is to have the county society write in and say, "We want these men to become associate members." That will save reading 176 names this year.

THE SPEAKER: This will be referred to the Reference Committee on Constitution and Bylaws.

Are there any further resolutions to be presented?

X—23. RESOLUTION RE STUDY BY AMA OF THE GENERAL PRACTICE OF MEDICINE

E. H. FENTON, M.D. (Wayne):

"WHEREAS, (1) the problem of providing sufficient numbers of general physicians is paramount in rendering comprehensive medical care to the American people, and

"WHEREAS, (2) there is evidence that (a) medical students demonstrate less interest in the general practice of medicine as they progress through medical school and internship; (b) problems of hospital staff membership and privileges are intimately related to the dearth of general practice medical personnel; therefore, be it

"RESOLVED: That this House of Delegates instruct its delegates to the American Medical Association to introduce into the House of Delegates of the AMA a resolution calling upon the AMA to initiate an exhaustive study of the whole problem of the general practice of medicine, including (a) its scope and its limitations; (b) the adequacy of preparation for general practice including medical school training, internship and residency training, and its effect on the supply of general physicians; (c) the problems of general physicians in relation to the limitation of their hospital staff privileges or their exclusion from hospitals, and the effect of these practices on the quality of medical care; (d) all other problems related to the general practice of medicine as they affect the quality, cost and adequacy of the medical care of the American people."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

X—24. RESOLUTION RE INFORMATION TO CONTRACT HOLDERS BY MHS AND MMS

O. J. JOHNSON, M.D. (Bay):

"WHEREAS, considerable confusion is resulting from the difference between sales propaganda and the word and intent of the policy of Michigan Hospital Service and Michigan Medical Service, and

"WHEREAS, it should devolve upon the insurance companies properly to present the provisions of their policies to prospective policyholders, and

"WHEREAS, the information given out by Michigan Hospital Service and Michigan Medical Service offices does not always answer the questions of the patient and physician satisfactorily, and tends to place the responsibility on the physician, and

"WHEREAS, this lowers the public relations position of the physician and embarrasses him before his patients; therefore, be it

"RESOLVED: That the Michigan State Medical Society House of Delegates recommend that Michigan Hospital Service and Michigan Medical Service clearly explain to present and prospective policyholders the restrictive provisions of the policy; and be it further

"RESOLVED: That Michigan Hospital Service and Michigan Medical Service assume the obligation of defending the provisions in their policies when contested by policyholders."

THE SPEAKER: This will be referred to the Reference Committee on Medical Service and Prepayment Insurance.

(The meeting recessed at 11:10 a.m.)

TUESDAY EVENING SESSION

September 28, 1954

The meeting reconvened at 8:15 p.m., J. E. Livesay, M.D., Speaker of the House of Delegates, presiding.

THE SPEAKER: As you know, this summer the Michigan State Medical Society took great pleasure in dedicating the Beaumont Memorial on Mackinac Island. You have also heard that there is a deficit for this project. We would like to remind you once again that when you go back to your local society you should try to stimulate some interest for voluntary contributions from doctors for this project.

For those of you who were not present and who have not been too close to this matter, we have for you tonight a ten-minute film, the first half of which will be narrated by Mr. Brennaman of our Public Relations Department, the second half of which has sound. It is a film of the actual dedication ceremonies. May I say that the film was made by the University of Michigan in connection with one of their historical film series. It is through their generosity that we are able to show you this film tonight.

(The film was shown.)

THE SPEAKER: We especially want to thank the projectionists for their time in coming here tonight and bringing us this film. I trust that the Beaumont Memorial is a bit more of a reality to you men now than it was before.

We have with us at this session several guests. I don't know how many are in the audience. Is Dr. Vaughan, President of the Illinois State Medical Society, in the room? (No.)

We have with us tonight a gentleman you met this afternoon at another meeting. Dr. Elmer Hess, President-elect of the American Medical Association. *(Applause)*

The aide to the President of the American Medical Association, Mr. Edward Uzemack, of Chicago. *(Applause)*

Dr. A. J. McCarey, President-elect of the Wisconsin State Medical Society. *(Applause)*

Their legal counsel, Mr. Murphy, is out in the lobby.

Earlier at this session you met the men from the Ontario Medical Society.

With us also is Dr. Kenneth W. Toothaker of Lansing, President-elect of the Michigan Academy of General Practice. *(Applause)*

Mr. Tom Hendricks, Secretary of the AMA Council on Medical Service. *(Applause)*

Also, Dr. J. Earl McIntyre, Secretary of the State Board of Registration in Medicine, from Lansing. He is a former Councilor from the Second District. *(Applause)*

We have with us another guest. I would like to ask the Councilor from the Sixth District to come forward with his guest. Dr. Hiscock.

H. H. HISCOCK, M.D.: Mr. Speaker and Members of the House of Delegates:

It is a very great honor for me to present to you this evening your new honorary member. You have heard of all the things he has done in lay cancer work, being honored by the United States Government on the National Research Board, also the national Board of Cancer.

For a number of years he has been head of our State Cancer Society and has done a great deal of work locally. Now, if for no other reason, he gives us honor because of his sponsoring of the Cancer Day program in the Genesee County Medical Society, which has become one of the outstanding cancer programs of the country.

It is a great pleasure for me to present to you Mr. Donald Johnson, honorary member of the Michigan State Medical Society.

The audience arose and applauded.

MR. DONALD JOHNSON (Flint): Dr. Hiscock, Dr. Livesay and Members of the House of Delegates:

This honor is humbly and gratefully received and appreciated. It is a pleasure and a privilege to be associated with the profession that is dedicated to protecting the well and healing the sick. I would also like to be counted in with a group that unhesitatingly challenges all philosophies of living and holds fast only to those that are good.

I am happy to accept this honor tonight, not only for myself but for my associates in the American Cancer Society, whose efforts and support through the years have brought me many rich honors, all of them undeserved.

A word of appreciation goes also to those members of the Genesee County Medical Society, who certainly must have had something to do with this tonight.

Thank you again. *(Applause)*

THE SPEAKER: The next matter of business concerns supplemental reports of reference committees.

XIII-13. REFERENCE COMMITTEE REPORT ON NEW BUSINESS: CERTIFICATION OF ASSOCIATE MEMBERS

C. K. HASLEY, M.D.: We have one resolution to consider. You will recall it was introduced by Dr. Owen. He remarked, "Let's throw it at the Reference Committee and see what they come up with." After a lot of deliberation we have come up with this, and I hope it will be satisfactory.

On page 141 of the Handbook you will find Chapter V, Section 3, paragraph (b). That paragraph will stand as it is, and in addition to that we have added one sentence. We have taken the liberty of changing the former wording, but it has the same context:

"Such intern, resident or teaching fellow may become an associate member of the Michigan State Medical Society without action of the House of Delegates provided he has been certified to the Michigan State Medical Society through formal application to the Michigan State Medical Society Secretary by his component county medical society."

Mr. Speaker, I move the adoption of this report.

C. I. OWEN, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XIII—12(h). RESOLUTION RE STUDY BY AMA OF GENERAL PRACTICE OF MEDICINE

O. J. JOHNSON, M.D.: Mr. Speaker, the following resolution was submitted to our Reference Committee:

"WHEREAS, the problem of providing sufficient numbers of general physicians is paramount in rendering comprehensive medical care to the American people, and

"WHEREAS, there is evidence that (a) medical students demonstrate less interest in the general practice of medicine as they progress through medical school and internship; (b) problems of hospital staff membership and privileges are intimately related to the dearth of general practice medical personnel; therefore, be it

"RESOLVED: That this House of Delegates instruct its delegates to the American Medical Association to introduce into the House of Delegates of the AMA a resolution calling upon the AMA to initiate an exhaustive study of the whole problem of the general practice of medicine, including (a) its scope and its limitations; (b) the adequacy of preparation for general practice, including medical school training, internship and residency training, and its effect on the supply of general physicians; (c) the problems of general physicians in relation to the limitation of their hospital staff privileges or their exclusion from hospitals, and the effect of these practices on the quality of medical care; (d) all other problems related to the general practice of medicine as they affect the quality, cost and adequacy of the medical care of the American people."

The Reference Committee recommends the adoption of this resolution, and I move that the action of the Reference Committee be accepted.

R. W. TEED, M.D.: Second the motion.

O. K. ENGELKE, M.D.: Mr. Speaker, I am in general agreement with this resolution, but one term that prevailed throughout the resolution was "general physician." That is a new name to me. I would like to offer an amendment.

I would like to amend the resolution by changing the term *"general physician"* wherever it is found in this resolution to *"physician in the general practice of medicine."*

I so move, Mr. Speaker.

F. W. SMITH, M.D. (Clinton): Second the amendment.

(The amendment was put to a vote and was carried by a vote of 54 "aye" and 20 "no.")

THE SPEAKER: The motion to amend is carried.

We will now vote on the main motion as amended, the motion to approve the resolution as amended.

(The motion was put to a vote and was carried unanimously.)

THE SPEAKER: Is there an additional report from the Reference Committee on Legislation and Public Relations?

Is there an additional report from the Committee on Hygiene and Public Health?

XIII—12(i). RESOLUTION RE INFORMATION TO CONTRACT HOLDERS OF MHS AND MMS

OTTO O. BECK, M.D.: Mr. Speaker, a resolution was introduced to the House this morning in reference to Michigan Hospital Service and Michigan Medical Service, as follows:

"WHEREAS, considerable confusion is resulting from the difference between sales propaganda and the word and intent of the policy of Michigan Hospital Service and Michigan Medical Service, and

"WHEREAS, it should devolve upon the companies properly to present the provisions of their policies to prospective policyholders, and

"WHEREAS, the information given out by Michigan Hospital Service and Michigan Medical Service offices does not always answer the questions of the patient and physician satisfactorily, and tends to place the responsibility on the physician, and

"WHEREAS, this lowers the public relations position of the physician and embarrasses him before his patients; therefore, be it

"RESOLVED: That the Michigan State Medical Society House of Delegates recommend that Michigan Hospital Service and Michigan Medical Service clearly explain to present and prospective policyholders the restrictive provisions of the policy; and be it further

"RESOLVED: That Michigan Hospital Service and Michigan Medical Service assume the obligation of defending the provisions in their policies when contested by policyholders."

Your Reference Committee disapproves the resolution as presented because of the inherent difficulty in its implementation; but to conform to the intent of the resoluion, the Reference Committee offers the following:

"WHEREAS, the onus of abuse is often placed upon the doctor unjustifiably because of misunderstanding of the provisions of the contract and the difficulties of interpreting it, and the lack of knowledge of the provisions of the contract by all parties concerned; therefore be it

"RESOLVED: That the attention of Blue Cross and Blue Shield be called to this matter, and that they be requested to use every approach to abate these mistakes; and be it further

"RESOLVED: That The Council of the Michigan State Medical Society be requested to utilize its best offices to effect satisfactory results."

Mr. Speaker, I move the adoption of this report.

E. C. Texter, M.D. (Wayne): Second the motion.

(The motion was put to a vote and was carried unanimously.)

XV. ELECTIONS

XV—1. COUNCILOR OF 14TH DISTRICT

The Speaker: We are now ready to proceed with elections. The first to be elected is a Councilor for the Fourteenth District. B. M. Harris, M.D., of Ypsilanti, is the incumbent.

P. S. Barker, M.D. (Washtenaw): Mr. Speaker and Delegates: It is an honor and a privilege to place in nomination as Councilor from the Fourteenth District a man who has served part of a term as Councilor, filling the unexpired term of Dr. DeTar, to succeed to a new and complete term of five years as Councilor from the Fourteenth District.

Dr. Bradley M. Harris, of Ypsilanti, who, so I am told by members of the Council, has shown much industry and ability in the few years in which he has served as a Councilor, and who, in the opinion of the Washtenaw County Society, richly deserves election to this office. *(Applause)*

D. W. Thorup, M.D.: I move nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Harris.

R. A. Johnson, M.D.: I second the motion.

(The motion was put to a vote and was carried unanimously.)

The Speaker: Dr. Harris is elected. The Secretary will cast the ballot.

XV—2. COUNCILOR, 18TH DISTRICT

The next office is for Councilor of the Eighteenth District. Dr. William Bromme of Detroit is the incumbent.

E. A. Osius, M.D. (Wayne): Mr. Speaker and members of the House of Delegates, without any flourishes and without any eulogies, because he does not need them, because he is alive and active and working all the time, I nominate Dr. William Bromme to succeed himself. You all know him. He is Chairman of the Executive Committee of The Council.

G. T. McKean, M.D.: I second the nomination.

The Speaker: Are there additional nominations?

J. H. Schlemer, M.D. (Wayne): I move nominations be closed and Dr. Bromme be elected.

M. A. Darling, M.D. (Wayne): Second the motion.

(The motion was put to a vote and was carried unanimously.)

The Speaker: Dr. Bromme is elected. The Secretary will cast the ballot.

XV.—4. DELEGATES TO AMA

The next election is that of our delegates to the American Medical Association. There are three incumbents—W. D. Barrett, M.D., of Detroit; W. H. Huron, M.D., of Iron Mountain, and R. L. Novy, M.D., of Detroit.

Nominations are now in order.

John T. P. Wickliffe, M.D. (Houghton-Baraga-Keweenaw): I would like to place in nomination our good friend from the Upper Peninsula who is doing a good job in the House of Delegates, Bill Huron.

R. A. Johnson, M.D.: I second the nomination.

G. C. Penberthy, M.D. (Wayne): Mr. Speaker and members of the House, the report of the AMA delegates, given by Dr. Hyland, spoke for itself. That report emphasized the importance of an individual to carry on as a delegate from the State of Michigan, and it is my great pleasure to nominate Dr. Wyman D. Barrett to succeed himself as a delegate to the AMA. He has done a marvelous job, and I am sure our President-elect of the AMA, Dr. Elmer Hess, who is present, will agree with me that Dr. Barrett has done a mighty fine job in the House of Delegates.

I take great pleasure in nominating him to succeed himself.

The Speaker: Are there further nominations?

R. A. Johnson, M.D.: Mr. Speaker, I should like the privilege and opportunity of placing in nomination, to succeed himself, another delegate who has served admirably for fifteen years in this House of Delegates in yeoman service in Michigan Medical Service. For more than six years he has also served in the House of Delegates of the American Medical Association, and there he has made a name for himself as an influential and well-thought-of member of that House.

With great humility, and with pride and pleasure, I nominate Robert L. Novy, M.D., of Wayne County, to succeed himself.

The Speaker: Dr. Novy has been nominated. Are there any other nominations?

E. C. Texter, M.D.: I second the nomination of Dr. Novy.

W. W. Babcock, M.D. (Wayne): Mr. Speaker, as an alternate delegate to the American Medical Association, the three names placed in nomination are names of men who have rendered yeoman service. Years of service in the House of Delegates is of value to the State Society. Therefore, I move that nominations be closed and that the three nominees be elected.

G. T. McKean, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

The Speaker: Drs. Barrett, Huron and Novy have been re-elected as delegates to the American Medical Association.

Our Bylaws specify that the election shall be by ballot. However, it seems to me to be unnecessary in this event, because I don't believe there is any seniority established where there are three men elected at one time; am I correct? Thank you.

O. K. Engelke, M.D.: Is it necessary to move to sustain the Chair in that decision?

The Speaker: It might help.

O. K. Engelke, M.D.: Then I so move.

R. A. Johnson, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

XV—5. ALTERNATE DELEGATES TO AMA

The Speaker: We are now ready to proceed with the election of alternate delegates. C. I. Owen, M.D., of Detroit, G. W. Slagle, M.D., of Battle Creek, are incumbents. Dr. E. D. Spalding is deceased. There are three places to be filled. The floor is now open for nominations.

J. R. Rodger, M.D.: Mr. Speaker, two years ago I placed in nomination the name of one of the young men in The Council. He has since distinguished himself with good work in the delegation from Michigan to the American Medical Association.

I am proud to place before you the name of Dr. G. W. Slagle of Battle Creek to succeed himself.

J. P. Markey, M.D. (Saginaw): I second that nomination.

M. A. Darling, M.D.: It is no secret to this House that action cut down the life of a man who was very active in this organization as parliamentarian and known to all. Tonight we choose a man to finish his unexpired term.

The Wayne delegation would like to present the name of a man who has long served us ably and well. He has been President of the Wayne County Medical Society. He has occupied chairmanships in the General Practice Section of the American Medical Association.

I take great pleasure in nominating Dr. Arch Walls, of Detroit, to fill the unexpired term of Dr. Spalding.

THE SPEAKER: Dr. Walls has been nominated.

G. T. McKEAN, M.D.: I am very happy to place in nomination the name of Dr. C. I. Owen, of Detroit, on behalf of the Wayne delegation.

THE SPEAKER: Dr. Owen has been nominated.

W. L. BROSIUS, M.D. (Wayne): I second the nomination.

O. J. JOHNSON, M.D. (Bay): I wish to take this opportunity to place in nomination the name of Dr. John Rodger, of Northern Michigan, who has been very active in this House of Delegates, and who has shown that he has the interests of the medical profession and particularly the Michigan State Medical Society at heart at all times. I am sure you are fully aware of the work that he has done, and I feel he would very capably fill the position as alternate delegate to the American Medical Association.

THE SPEAKER: Dr. Rodger has been nominated. Are there further nominations?

J. H. SCHLEMER, M.D.: Mr. Speaker, I move that nominations be closed.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

THE SPEAKER: We now have four names to vote on for alternate delegates to the AMA.

THE SPEAKER: Please take the second ballot in your Handbook. Vote for three of the four names, placing your first choice at the top of the list, then the second and third. Seniority is determined in that way.

I would like to appoint as tellers Dr. Darling, Dr. Schlemer, Dr. McKean and Dr. Teed.

(Balloting.)

THE SPEAKER: If there is no objection, we will proceed with the next order of business while the tellers are counting the votes.

XV.—6. PRESIDENT-ELECT

We will proceed with the election of a President-elect.

J. R. HEIDENREICH, M.D.: I now have an honor which probably will come to me only once in my lifetime. Coming from the Upper Peninsula, it has been almost twenty-five years since we have had a man nominated for President-elect from that area. We have in our community a gentleman, a doctor, and a humanitarian. He is deeply respected by all his associates in his own area and throughout the State. He has been one of the leaders in organized medicine in the State. For many years he carried the torch of organized medicine in our local county. He was Secretary of the Society for fifteen years, and during most of those years he was also a member of this House.

Six years ago in this very room he was elected to The Council from our District, and for the past several years he has served on the Executive Committee of The Council as Chairman of the Finance Committee; he has taken good care of our finances, and has been very largely responsible for our home in Lansing.

I wish to present the name of Dr. William S. Jones, of Menominee, Michigan, as President-elect. *(Applause)*

THE SPEAKER: Dr. Jones has been nominated.

G. C. PENBERTHY, M.D.: I second the nomination.

E. A. OSIUS, M.D.: The "triumverate" would like to second it, also.

G. C. PENBERTHY, M.D.: I move nominations be closed.

L. F. HAYES, M.D.: Second the motion.

(The motion was put to a vote and was carried unanimously.)

THE SPEAKER: Congratulations, Dr. Jones. Will you please come forward?

(The audience arose and applauded.)

WILLIAM S. JONES, M.D. (Menominee): Thank you very much, gentlemen.

THE SPEAKER: Congratulations, Dr. Jones. Dr. Jones tells me that with this election he is relinquishing his position on The Council, which creates a vacancy in the Thirteenth District. There is an unexpired term of four years, I believe, which is to be filled.

The floor is now open for nominations for Councilor from the Thirteenth District.

XV—3. COUNCILOR, 13TH DISTRICT

W. H. HURON, M.D. (Dickinson-Iron): I would like to place in nomination the name of a man who has been a member of the House of Delegates for a number of years. Dr. John T. P. Wickliffe, of Calumet.

G. C. PENBERTHY, M.D.: May I support that nomination.

J. R. HEIDENREICH, M.D.: I move nominations be closed.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

THE SPEAKER: Dr. Wickliffe is declared elected.

The Vice Speaker will please take the Chair.

(K. H. Johnson, M.D., assumed the Chair.)

XV—7. SPEAKER OF THE HOUSE OF DELEGATES

CHAIRMAN JOHNSON: Gentlemen, nominations are now in order for Speaker of the House of Delegates.

C. W. COLWELL, M.D.: The man I would like to propose as Speaker of the House needs no introduction. He has been speaking to us for the last two days. I would like to propose the name of J. E. Livesay, M.D., to succeed himself.

E. A. OSIUS, M.D.: I move that nominations be closed and that the Secretary cast the unanimous ballot for Dr. Livesay.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

CHAIRMAN JOHNSON: Dr. Livesay is elected as Speaker of the House for the ensuing year. *(Applause)*

(The Speaker resumed the Chair.)

XV—8. VICE SPEAKER OF THE HOUSE OF DELEGATES

THE SPEAKER: Thank you very much, gentlemen. It is a real pleasure. It is also a real pleasure to be associated with the men who make up your Council and Executive Committee as we do the work of the Society throughout the year.

The floor is now open for nominations for Vice Speaker of the House of Delegates.

O. B. MCGILLICUDDY, M.D.: Mr. Speaker, I would like to nominate Dr. K. H. Johnson.

R. F. FENTON, M.D.: I second that.

F. D. JOHNSON, M.D. (Genesee): I move nominations be closed.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

THE SPEAKER: Dr. Johnson is declared elected. *(Applause)*. Dr. Johnson hasn't had a chance to say much tonight, so I will ask him to say a few words now.

K. H. JOHNSON, M.D.: All I can say is that I have heard all sorts of comments—"Vice Speaker" and "Speaker of Vice" and so on. I don't care—I'm looking for more of it.

W. A. SCOTT, M.D. (Kalamazoo): Mr. Speaker, I wish to move that the House commend the Speaker and the Vice Speaker for the manner in which they have conducted the House of Delegates meeting.

(Cries of "Support!")

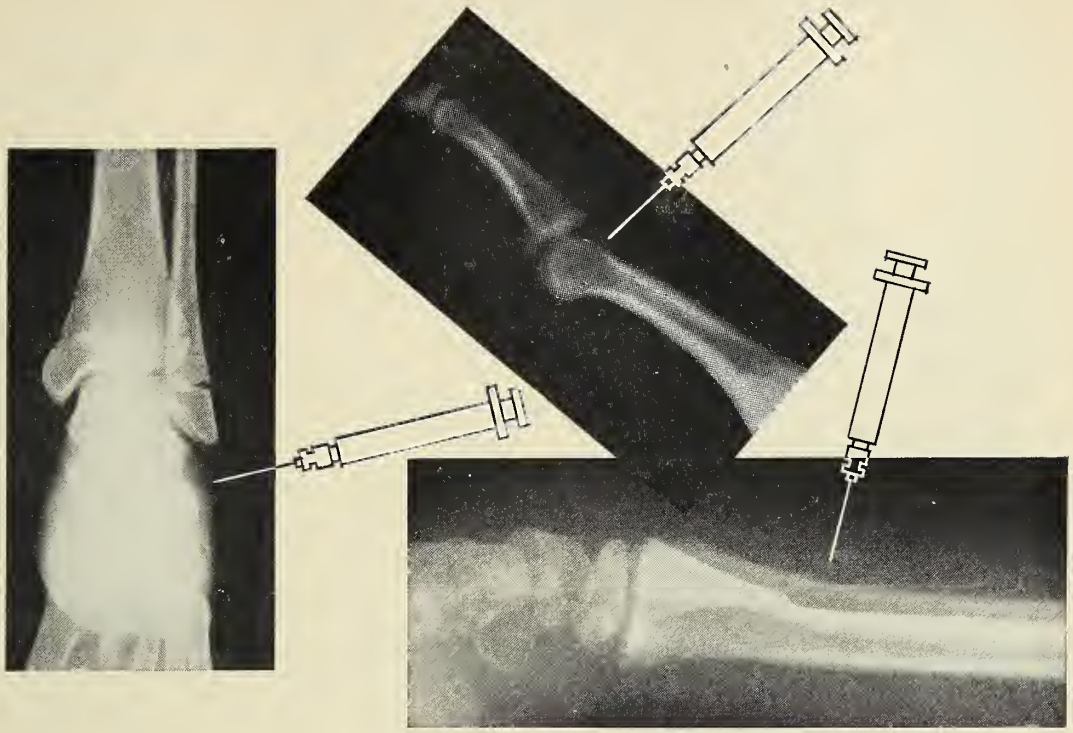
THE SPEAKER: Thank you very much, gentlemen.

(The audience arose and applauded.)

THE SPEAKER: We certainly thank all of you for your kind expression.

Perhaps this is the time to say what I had in mind to say anyway. I have been told so many times during the last two days how smoothly this particular session has gone. I assure you that we do not take any credit for that. I think two factors are responsible. One is

(Continued on Page 1437)



Use of Alidase® in Closed Wounds: Contusions, Sprains, Dislocations, Simple Fractures

In traumatic surgery[1] *where "definitive treatment . . . is often delayed while the surgeon waits for nature to dispose of hematoma and oedema" Alidase is an efficient means*[1, 2] *of accelerating dispersion of accumulated fluids.*

Swenson[2] has described his highly successful results with Alidase in various types of closed wounds. He summarized them as follows:

To remove local fluid accumulations in contusions or bruises, "The usual dose, 500 viscosity units Alidase® mixed in a small amount of normal saline, is injected into the localized fluid. Mixing the hyaluronidase in 1 per cent procaine solution will also produce local vasodilatation, relief of local pain and more rapid absorption of the fluid mass. This method can also be applied to traumatized bursae or synovial spaces which do not respond to repeated aspirations."

The point of maximal pain is infiltrated with 10 cc. of a 1 per cent procaine solution to which 500 viscosity units of Alidase have been added. With this simple technic, a high percentage of successful results has been obtained.

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Fluids administered with Alidase are rapidly absorbed from subcutaneous tissue. The simplicity of hypodermoclysis avoids the cumbersome arm board, permits convenient administration with little or no pain or swelling, is vein-sparing and saves nursing time in such conditions as burns, postoperative states, toxemias and parenteral alimentation.

Alidase (brand of hyaluronidase) is supplied in serum-type ampuls of 500 viscosity units. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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1. MacAusland, W. R., Jr.; Gartland, J. J., and Hallock, H.: The Use of Hyaluronidase in Orthopaedic Surgery, J. Bone & Joint Surg. *35-A*:604 (July) 1953.
2. Swenson, S. A., Jr.: Minor Surgical Aspects of Closed Wounds, Am. J. Surg. *87*:384 (March) 1954.



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DETROIT

Legal Opinions

William J. Burns, Executive Director
Michigan State Medical Society
Lansing 15, Michigan

Dear Mr. Burns:

You have referred to me for opinion the following question: what is the legal status of artificial insemination of the human by a donor other than the husband?

Artificial insemination of the human has no established legal status in any state of the union. As far as may be determined, there are no statutes of any kind bearing directly on the subject, nor have there been any reported cases in this country squarely resolving any of the important legal problems which may arise from such a procedure. The few reported cases touching on the subject cannot be regarded as determining any of the major legal consequences of artificial insemination by a donor. Reference will be made to these few decisions later in the opinion.

Nevertheless, the many implications which arise have been under discussion by doctors, lawyers and sociologists on several occasions. The "British Medical Journal" of May 3, 1947, carried an account of a conference sponsored by the Public Morality Council of England in 1946. The lawyers present at the discussion agreed that questions arising in relation to artificial insemination by a donor other than the husband are troublesome for almost complete lack of authority either in statute or in decisions of courts. However, there was fairly general agreement: (1) that a child produced by means of a donor's semen is illegitimate; (2) that the introduction into a wife's body by unusual means of the seed of a man other than her husband is adultery; (3) that the adulterous character of an act cannot be removed by consent of the other spouse; (4) that a donor commits adultery if his semen is used for artificial insemination; and (5) that the physician who performs the procedure stands on insecure ground and is close to a number of dangerous pitfalls.

There were during the discussion certain hazards and doubtful factors referred to: (1) the law governing the registration of births—if the husband is registered as the father, there may be an infringement of the law, which may subject the husband and the advising and abetting physician to legal difficulties—if the father's name is not stated, the child's illegitimacy is patent to everyone who sees the certificate; and (2) if there is a will or settlement creating an interest in property in favor of the "heirs of the body" of the couple, they may be faced with the alternative of disclosing the child's illegitimacy or of committing a fraud on the person who would benefit in the absence of legitimate offspring.

The same subject was under discussion in 1945 at Chicago during the symposium on medicolegal problems, which is reported at length in a publication by J. B. Lippincott Company under the title "Symposium on Medicolegal Problems Under the Co-Sponsorship of The Institute of Medicine of Chicago and the Chicago Bar Association." Discussion treating the subject and its implications is to be found at pages 43 to 87 of this report. The participants in the discussion were confronted with the same difficulties that their British counterparts faced in the conference referred to above, that is, lack of precedent, possible legal hazards to the physician, parents, donor and offspring.

In the case of Russell v. Russell (1924), an English

(Continued on Page 1416)

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 1414)

case (13 British Ruling Cases 246), the view was expressed that fecundation ab extra is adultery.

In Orford v Orford, a Canadian case, decided in 1921 (49 Ont. Law Reports 15), it was said, but only by way of dictum, that artificial insemination using an extraneous donor could constitute adultery.

On the other hand, in 1945 a case arose in Chicago wherein a husband sought divorce on the grounds of adultery alleging that the child born to his wife was not his. It was found that the child was procured through heterologous artificial insemination. The trial court held that no definition of adultery included artificial insemination. The case did not reach an appellate court, and is therefore not officially reported.

In a New York case, Strnad v Strnad, 78 N.Y.S. (2d) 390 (1948), the plaintiff wife filed a motion to determine the defendant's right to visit the minor child of the parties. The court assumed, in the light of the record and the concessions made by the defendant, that the plaintiff was artificially inseminated with the defendant's consent and that the child is not of the blood of the defendant.

The court held that the child was not illegitimate, but refused to pass on the legal consequences insofar as property rights are concerned and would not express an opinion on the propriety of procreation by the medium of artificial insemination on the ground that the latter problem, particularly, is in the field of sociology, morality, and religion. However, the defendant was granted the right to visit the minor child, on the theory that the child had been in fact adopted or semi-adopted by the husband.

Due to the uncertainties and hazards which confront the physician participating in heterologous insemination, it has been suggested that certain precautions should be observed.

1. The fact of the husband's sterility should be positively established, using material obtained by testicular puncture as well as that obtained in the usual way.
2. A "pooled" specimen, material from husband and other donor, should if possible be used. There then remains some reasonable legal probability that the husband may be the father—or, at any rate, it would be difficult to prove beyond any reasonable doubt that he is not the father.
3. The identity of the donor should be absolutely concealed from the recipient donee, and that of the recipient donee from the donor. This necessity precludes the utilization of relative or friend as donor.
4. Written permission must be obtained from the donor authorizing the physician to use the semen for artificial insemination in such manner and upon such patient as the physician may solely decide. The written authorization of the donor's wife must be joined to that of the donor in the event that he is married.
5. The consent and authorization of the patient and the patient's husband must be given in writing.

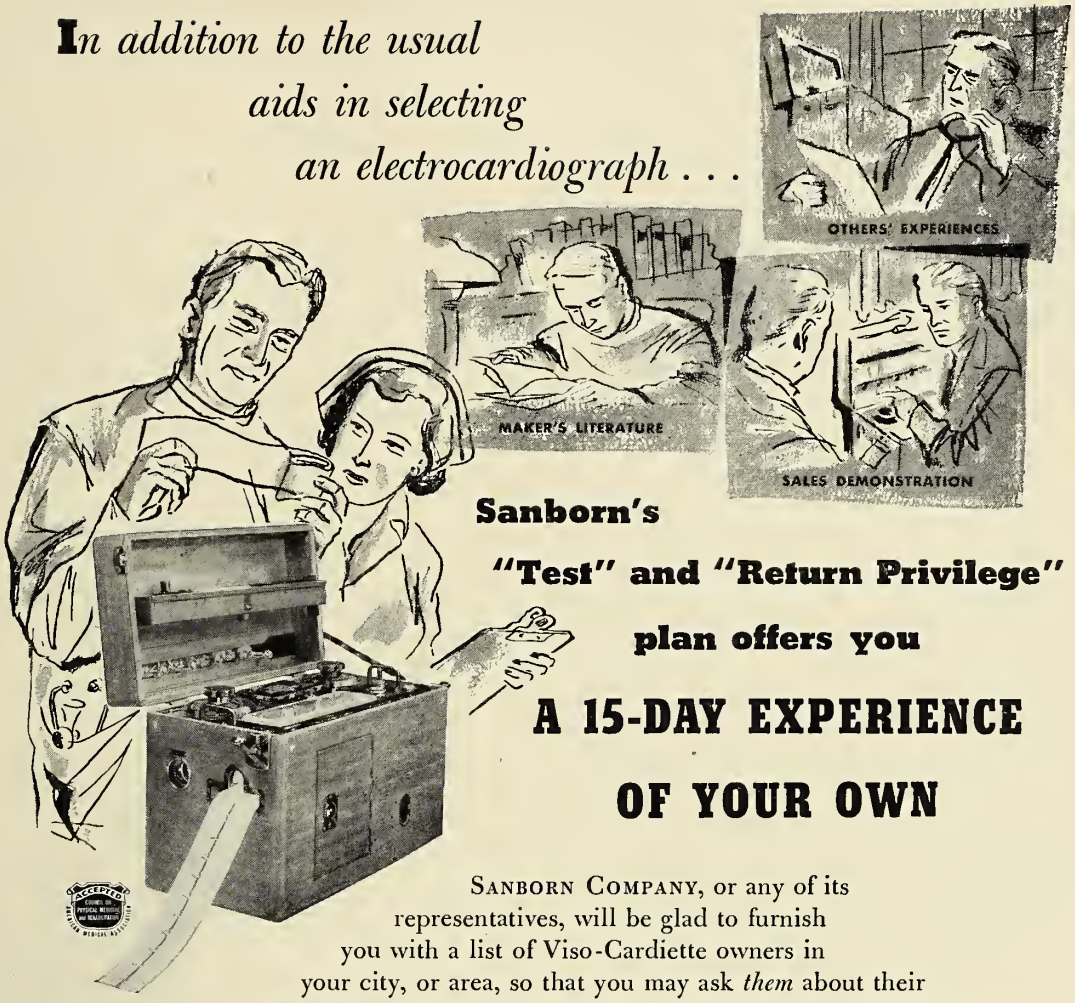
Further discussions of the subject may be found in the "Medicolegal Criminological Review of England" for July-September, 1944, and in the "Journal of the American Medical Association," Vol. 107, No. 19, at page 1531, the latter is an article by Frances I. Seymour, M.D., and Alfred Koerner, M.D., entitled "Medicolegal Aspect of Artificial Insemination."

Very truly yours,
J. Joseph Herbert, *Legal Counsel*

September 20, 1954

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In Memoriam



JOHN ALEXANDER, M.D., professor of thoracic surgery at University of Michigan Medical School and chief surgeon at the Michigan State Sanatorium at Howell, died July 16, 1954, in Ann Arbor. Dr. Alexander was sixty-three years old.

Born in Philadelphia, Pennsylvania, he attended the University of Pennsylvania, receiving a B.S. degree in 1912, an M.A. degree in 1913, and an M.D. degree in 1916.

Dr. Alexander served in the Army Medical Corps of both France and the United States during World War I, and took postgraduate medicine at schools in London, Paris, and Berlin.

Dr. Alexander came to the University of Michigan in 1920 as instructor in surgery. He subsequently served as assistant professor and associate professor before acquiring his full professorship in 1932.

Dr. Alexander was the first man to write a book in English on the surgical treatment of tuberculosis, and he was the author of many articles and two textbooks in his specialty.

Dr. Alexander received many professional and academic honors during his career. Among his numerous honors was the Henry Russell Award in 1930, for distinguished scholarship and ability as a teacher. He was a holder of the Trudeau Medal, highest award of the National Tuberculosis Association. He was a member of many national and international medical and surgical organizations.

Dr. Alexander is survived by his widow, Emma; two sisters and a brother.

ELTON P. BILLINGS, M.D., died July 3, 1954, at his home in Grand Rapids, where he had practiced since 1908.

Born in Cedar Rapids, Iowa, Dr. Billings had lived in Grand Rapids since he was eight years old. Following his graduation from Central High School, Grand Rapids, he attended the University of Michigan.

Dr. Billings taught zoology and chemistry in Union High School, Grand Rapids, for six years before returning to medical school at Ann Arbor, where he received his M.D. degree in 1908.

In 1916, Dr. Billings' testimony in a famous murder trial gained nationwide publicity. He helped in the autopsy on the body of John E. Peck, Grand Rapids millionaire, who died while visiting New York. A son-in-law was subsequently executed upon conviction of murder by poison.

Dr. Billings was a life member of MSMS. He was very active in various fraternal organizations.

He is survived by his widow, Ruth, and a son.

ARTHUR GRIGG, M.D., a family physician in Saginaw for 48 years, and a pioneer in the use of radium for treatment of cancer, died July 23, 1954. He was 85 years old.

Born in Brydges, Ontario, Dr. Grigg was graduated from Bellevue Medical College in New York City in 1893. Immediately following his graduation, he moved to Standish where he set up practice in what was then a thriving lumbering community. He moved to Saginaw in 1902, continuing in active practice until 1950.

In recent years, Dr. Grigg was cited as one of the three known doctors of medicine in the United States, who used radium for the treatment of cancer as early as 1907.

Dr. Grigg served on the faculty of Saginaw Medical College from 1896 to 1903.

He was a charter member of the Fifty Year Club of the Michigan State Medical Society, and was an Emeritus Member of MSMS. Dr. Grigg is survived by his son, Arthur P. Grigg, M.D., of Saginaw, and two grandchildren.

HELEN F. PRICE, M.D., who had practiced in Ann Arbor for the past 15 years, died at her home July 9, 1954, at the age of 52.

Dr. Price was known as a general practitioner, and during the years from 1941-1950 she also served half-time on the staff of the University of Michigan Health Service.

Born in LaMonte, Missouri, Dr. Price attended public school there and was graduated from Central College in Fayette, Missouri. She then took advanced study and received a Master's Degree from the University of Missouri and a Ph.D. degree in zoology from the University of Michigan. Thereafter, she attended University of Michigan Medical School.

Dr. Price is survived by three brothers and two sisters.

STEPHEN S. SKRZYCKI, M.D., Mayor of Hamtramck for ten years until 1952, died August 5, 1954, following a long illness. He was 61 years old.

Dr. Skrzycki was born in Buffalo, N. Y., and received his medical education at Temple University, Philadelphia. He served his internship at St. Mary's (now Detroit Memorial) Hospital, and began practice in Hamtramck in 1917. He had been a member of the staff of St. Francis Hospital, Hamtramck, since it was founded. Much of his practice was devoted to obstetrics.

Known best for his political activities, outside of his medical practice, Dr. Skrzycki was also an accomplished violinist and lover of music.

He was a Fellow of the American College of Surgeons

(Continued on Page 1420)

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"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

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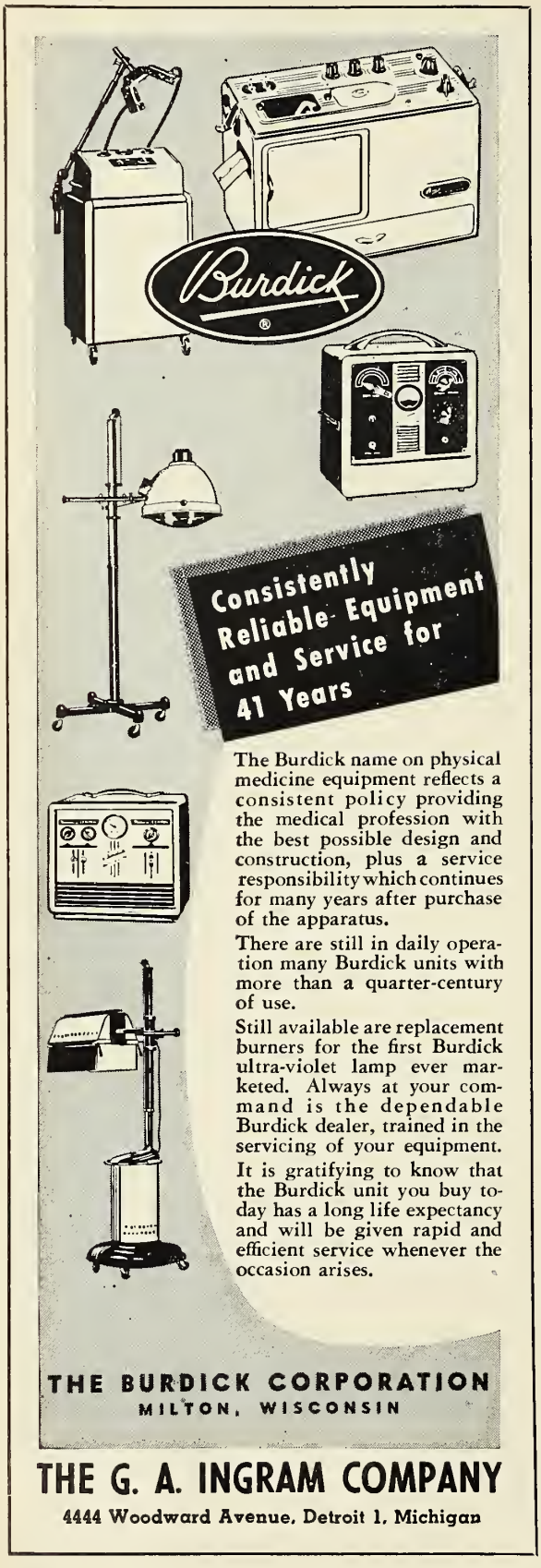
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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

NEW YORK, N. Y. Ayerst MONTREAL, CANADA



STEPHAN S. SKRZYCKI

(Continued from Page 1418)

and was also a member of a number of fraternal organizations.

Surviving are his widow, Ann; a son, Stephan, Jr.; three sisters and three brothers.

MASON E. VROMAN, M.D., who practiced in Port Huron for almost fifty years, died June 22, 1954, at the age of eighty.

Dr. Vroman, a retired member of MSMS, discontinued his practice in 1946. He had established his practice in Port Huron in 1907, three years after his graduation from the Detroit College of Medicine, predecessor of the present Wayne University College of Medicine.

A native of Muskegon, Dr. Vroman was graduated from Vicksburg High School. After receiving his M.D. degree, he attended the New York Postgraduate School of Medicine, concentrating on diseases of the eye, ear, nose and throat.

He is survived by one son, Charles, of Lakeport, and a sister. His wife died in 1948.

HORACE F. W. WARDEN, M.D., of Detroit, died July 18, 1954, at the age of 65.

Dr. Warden was born in Calcutta, India, the son of a doctor of medicine who served in the 13th Bengal Lancers and became professor of chemistry at Calcutta University. Dr. Warden was a graduate of Cambridge University in London, and studied medicine at St. George's Hospital, London. He served in the British Army during World War I. Receiving a medical discharge, Dr. Warden came to the United States on vacation to recuperate, and eventually ended up by joining the United States Army as a captain in the Medical Corps. Following the war, he practiced in Cumberland, Maryland, for four years before establishing his practice in Detroit.

Dr. Warden is survived by his wife, Eleanor.

WALTER J. WILSON, M.D., well-known Detroit cardiologist, died at the age of 78, following a long illness.

Dr. Wilson was a lifelong resident of Detroit. He was graduated from the Detroit College of Medicine, now Wayne University College of Medicine, in 1897, when he was 21 years old. He served his internship at Harper Hospital.

While in private practice, he held the post of clinical professor of medicine at the Detroit College of Medicine for a number of years.

Dr. Wilson was on the staff of Detroit Memorial and Henry Ford Hospitals. He was a Fellow of the American College of Physicians. He was an Emeritus member of the Michigan State Medical Society.

Surviving are his widow, Amelia; a son, Walter J. Wilson, Jr., M.D.; two daughters, six grandchildren, and three great-grandchildren.

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Communications

Dr. Wilfrid Haughey
Editor, Journal, Michigan State Medical Society
Battle Creek, Michigan

Dear Dr. Haughey:

Within a short time, there will probably appear in the dental literature, both locally and nationally, a letter by the foremost research authority in this country on fluorine, Dr. F. J. McClure, National Institute of Health, purporting to discredit my paper on "Medical Evidence Against Fluoridation of Public Water Supplies." In this paper I have pointed to the many flaws in his research, its contradictory evidence and biased conclusions. Although his studies are used as proof that fluorides at 1 part per million concentration added to drinking water are harmless, it is inherent in the nature of his experiments that they do not lend themselves to final conclusions.

His letter actually strengthens my position because his criticism concentrates on minor details which are easy to refute and ignores the core of my argument, namely, the danger of chronic fluorine intoxication from drinking this water. Both his letter and my rebuttal to it, too lengthy to be published in the MICHIGAN STATE MEDICAL JOURNAL, are available upon request through my office.

I have been asked by members of the Society why I am opposing fluoridation. As a physician, I am concerned about its hazards to health; as a scientist, I am startled by the misrepresentations, the misquotations and biased interpretations of the available literature and the ruthless suppression of data unfavorable to this project; as a citizen I am shocked at the methods being used to promote it.

Yours truly,
GEORGE L. WALDBOTT, M.D.

October 21, 1954
Detroit, Michigan

John M. Dorsey, M.D.
Wayne University College of Medicine
1401 Rivard Street
Detroit 7, Michigan

Dear Doctor Dorsey:

We greatly appreciate the article which you sent us, "Upon Considering My Age," which appeared in THE JOURNAL of the Michigan State Medical Society.

It is delightfully written and the subject matter is presented from a wise and philosophical view-point. It is not very often that we run articles outside the strict borders of clinical medicine, but if you should feel inclined to write an editorial, at some time, on similar subject matter for GERIATRICS, we should be most interested in receiving it. We suggest a possible length of 1,000 words.

Sincerely yours,
VIRGINIA L. DUSTIN
Managing Editor, Geriatrics

Minneapolis, Minn.
Oct. 5, 1954

Mr. Hugh W. Brenneman
Public Relations Counsel
Michigan State Medical Society
Lansing, Michigan

Dear Mr. Brenneman:

I want to thank you for your medical associates brochure "In Planning Your Career." I have circulated it among our staff and have referred it to several city agencies. It is the best publication of its kind that I have had the privilege to see.

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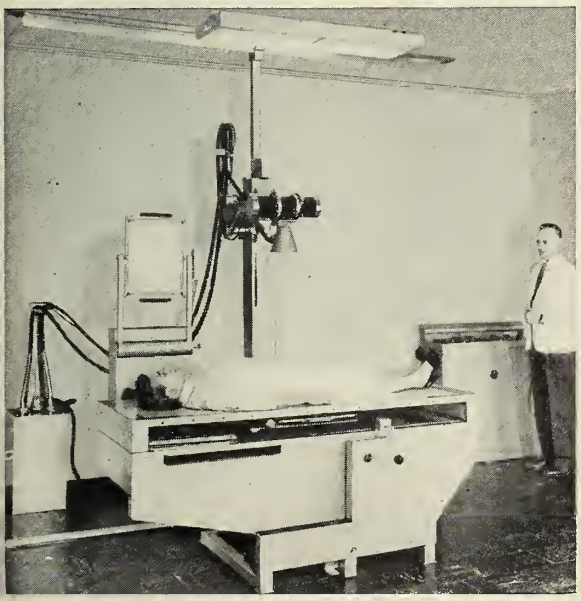
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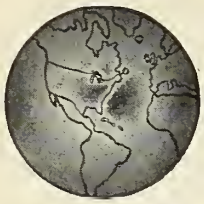
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MICHIGAN AUTHORS

Donald J. Barnes, M.D., Detroit, is the author of an article entitled "Pitfalls and Styles in Infant Feeding," published in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, July, 1954, a condensation of which appears in *Current Medical Digest,* October, 1954.

Edgar A. Kahn, M.D., Ann Arbor, is the author of an article entitled "Twenty Years Experience With the Surgery of Hypertension," the Presidential Address, presented at the annual meeting of the Harvey Cushing Society, Sante Fe, New Mexico, May 6, 1954. This paper is published in *The New England Journal of Medicine,* October 14, 1954.

Walter M. Whitehouse, M.D., and **Fred J. Hodges, M.D.,** Ann Arbor, are the authors of an article entitled "Evaluation of Urokon as a Cholangiographic Medium: A Preliminary Report," published in the *University of Michigan Medical Bulletin,* September, 1954.

Walter M. Whitehouse, M.D., and **Arthur S. Shufro, M.D.,** Ann Arbor, are the authors of an article entitled "A Preliminary Clinical Evaluation of Acetyl-Telepaque," published in the *University of Michigan Medical Bulletin,* September, 1954.

Vivian Iob, Ph.D., and **Ralph D. Mahon, M.D.,** Ann Arbor, are the authors of an article entitled "Postoperative Response to Small Water Loads: III. Splanchnicectomy," published in the *University of Michigan Medical Bulletin,* September, 1954.

Alfred H. Whittaker, M.D., Detroit, is the author of an article entitled "Open Reduction Treatment of Fractures of the Os Calcis" published in *Industrial Medicine and Surgery,* October, 1954.

Philip J. Howard, M.D., Detroit, is the author of an article entitled "Comparison of the Causes of Stillbirths and Neonatal Deaths," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

Julius Stone, M.D., Detroit, formerly of Charleston, West Virginia, is the author of an article entitled "One Year of Mass Blood Testing for Syphilis in West Virginia" published in *The West Virginia Medical Journal,* September, 1954.

Hermann Pinkus, M.D., Detroit, is the author of an article entitled "In Commemoration of the 100th Anniversary of the Birth of Paul Ehrlich" published in *The American Journal of Clinical Pathology,* July, 1954.

Owen S. Hendren, M.D., and **Hermann Pinkus, M.D.,** Detroit, are the authors of an article entitled "Observations on the Reaction of Chronic Inflammatory Dermatoses and of Normal Skin To Varied Concentrations of Thorium X," published in *The Journal of Investigative Dermatology,* June, 1954.

Frederick Stenn, M.D., Chicago, is the author of an article entitled "Medical Maxims of an Internist" published in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, April, 1954, and an abstract of which appears in the *Current Medical Digest* for September, 1954.

William White, Ph.D., Detroit, is the author of a series of articles entitled "Osler, Part I: Student, Professor, Author," and "Osler, Part II: Johns Hopkins To Oxford," published in September, 1954, and October, 1954, issues of *International Record of Medicine* and *General Practice Clinics.*

Alfred H. Whittaker, M.D., Detroit, is the author of an article entitled "The Beaumont Memorial on Mackinac Island" read at the twenty-seventh annual meeting of the American Association of the History of Medicine at New Haven, Connecticut, May 7, 1954, and published in the *Bulletin of the History of Medicine,* July-August, 1954.

James H. Whittaker, M.D., Detroit, is the author of an article entitled "James T. Whittaker, M.D., of Cincinnati," published in *The Ohio State Medical Journal,* February, 1954.

G. C. Brown, A. S. Rabson, and **J. H. Schieble,** Ann Arbor, and the authors of an article entitled "The Effect of Gamma Globulin on Subclinical Infection in Familial Associates of Poliomyelitis Cases. I. Quantitative Estimation of Fecal Virus," published in the *Journal of Immunology,* July, 1954.

Robert E. L. Berry, M.D., Vivian Iob, Ph.D., and **Paul Hodgson, M.D.,** Ann Arbor, are the authors of an article entitled "Tolerance of Elderly Surgical Patients To Intravenous Dextrose and Water Solutions," read at the Eleventh Annual Meeting of the Central Surgical Association, Detroit, February 19, 1954, and published in AMA *Archives of Surgery,* September, 1954.

Peter C. Trafas, M.D., Long Beach, California, **Ralph E. Carlson, M.D.,** Iron Mountain, **Gerald A. Lo Grippo, M.D.,** and **Conrad R. Lam, M.D.,** Detroit, are the authors of an article entitled "Chemical Sterilization of Arterial Homografts" read at the Eleventh Annual Meeting of the Central Surgical Association, Detroit, February 19, 1954, and published in AMA *Archives of Surgery,* September, 1954.

R. L. Haas, M.D., F.A.C.S., H. B. Latourette, M.D., and **W. M. Whitehouse, M.D.,** Ann Arbor, Michigan are the authors of an article entitled "Clinical Applications of Obstetric Radiology," published in *Surgery, Gynecology and Obstetrics,* October, 1954.

W. Lloyd Kemp, M.D., Birmingham, is the author of an article entitled "Spiritual Strength, Recreation, and

(Continued on Page 1426)

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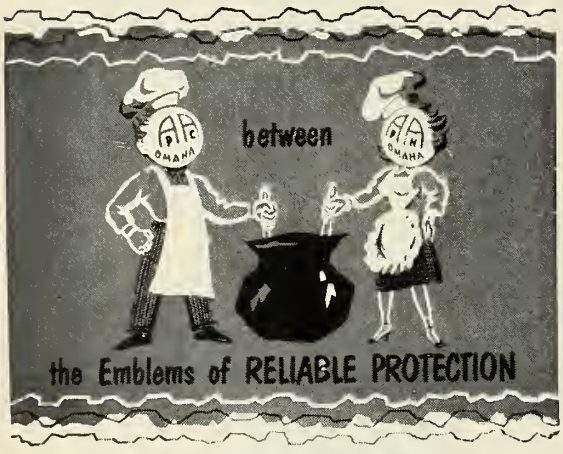
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*Dr.*_____

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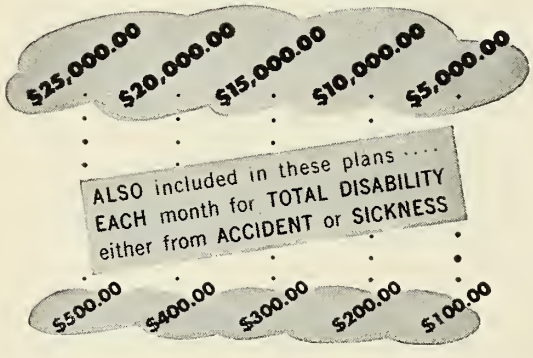
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MICHIGAN AUTHORS

(Continued from Page 1424)

Scientific Accomplishment in the Life of a Doctor," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

J. L. Dill, M.D., and **D. S. Bolstad, M.D.,** Detroit, are the authors of an article entitled "Glomus Jugularis Tumors: A Report of Four Cases," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

J. Martin Miller, M.D., Detroit, is the author of an article entitled "Nodular Goiter and Thyroid Cancer" published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

John Lyford, III, M.D., Detroit, is the author of an article entitled "Idiopathic Genu Recurvatum As a Cause of Knee Pain Simulating the Internal Derangement Syndrome," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

J. P. Pratt, M.D., Detroit, is the author of an article entitled "Aftermath of Abdominal Exploration," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

Frank R. Menagh, M.D., Detroit, is the author of an article entitled "The Value of the Treponema Pallida Immobilization Test (T.P.I) in the Diagnosis of Borderline Cases of Syphilis," published in the *Henry Ford Hospital Medical Bulletin,* September, 1954.

William H. Havener, M.D., and **Harold F. Falls, M.D.,** Ann Arbor, are the authors of an article entitled "Oxyphenonium (Antrenyl), A Potent Atropine Substitute," published in the AMA *Archives of Ophthalmology,* October, 1954.

J. C. Leshock, M.D., Lansing, is the author of an article entitled "Hospital Management of Bleeding Emergencies in Gynecology and Obstetrics," read before the Metropolitan Chapter of the American College of Surgeons, John B. Murphy Memorial Hall, April 19, 1954, and published in *The Illinois Medical Journal,* October, 1954.

Sidney Friedlaender, M.D., and **Alex S. Friedlaender, M.D.,** Detroit, are authors of an original article entitled "Effectiveness of a Portable Electrostatic Precipitator in Elimination of Environmental Allergens and Control of Allergic Symptoms" which appeared in *Annals of Allergy,* July-August, 1954.

S. J. Levin, M.D., Detroit, is the author of an original article entitled "Management of the Acute Asthmatic Attack in Childhood" which appeared in *The Pediatric Clinics of North America,* November, 1954.

* * *

A course in Electrocardiographic Interpretation for graduate physicians will be given at the Michael Reese Hospital by Louis N. Katz, M.D., Director of the Cardiovascular Department, Medical Research Institute, and associates. The class will meet each Wednesday from 7:00 to 9:00 p.m. for twelve weeks, beginning February 2.

For information, write Mrs. Ana Rose, Administrative Secretary, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago 16, Illinois.

The Annual County Secretaries-Public Relations Conference of MSMS on Sunday, January 30, at the Sheraton-Cadillac Hotel, Detroit, will feature a full day of ammunition for county medical society secretaries and public relations chairmen. Serious consideration of current problems on policies will be treated with a "light touch." Here is the preliminary program:

Morning Session—9:30 A.M.

PUBLIC RELATIONS PROGRAM

LEGISLATIVE FORUM

Expectations and Plans for 1955

"TWENTY-SIX WAYS TO MAKE FRIENDS"
Review, report and prognosis of 26-point program

"HOW TO DO IT"

A dynamic talk on how to sell medical PR by an outstanding sales speaker.

Buffet luncheon—12:30 P.M.

Afternoon Session—2:00 P.M.

COUNTY SECRETARIES PROGRAM

FOUR SKITS AND BUZZ SESSION

(a) Blue Cross utilization
(b) County Society programs
(c) Provident Plan available to all members, including new members
(d) MSMS Periodic Health Appraisal program
(e) PR by the office secretary

PANEL DISCUSSION ON CURRENT TRENDS IN THE PRACTICE OF MEDICINE

Dr. Edward H. Bregman, Chairman of the Arizona Division of the American Cancer Society, has announced the program for the Third Annual Cancer Seminar, to be presented at Paradise Inn in Phoenix, Arizona, on January 13, 14, and 15, 1955.

An outstanding panel of speakers will participate in the program which will concentrate this year on C. A. of the Gastrointestinal Tract, Female Genital Tract, Genitourinary Tract, and Bone Tumors. An Evaluation of present Day Treatment for Cancer of the Breast will be presented, as well as a discussion of the American Cancer Society's study of Smoking Practices in Relation to Health and Cancer. Registrations may be made with American Cancer Society, Arizona Division, 1429 North 1st Street, Phoenix, Arizona.

* * *

The Institute of Industrial Health of the University of Cincinnati will accept applications for a limited number of Fellowships to qualified candidates who wish to pursue a graduate course in preparation for the practice of Industrial Medicine. For information write the Institute of Industrial Health, College of Medicine, Eden and Bethesda, Cincinnati 19, Ohio.

* * *

"How to Adopt a Child in Michigan" is the title of an informative and interesting brochure published by the Michigan Welfare League. For copies, write the League at 482 Hollister Building, Lansing, Michigan.

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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

MEDICAL TELEVISION SHOWS, OVER WJBK-TV

Sponsored by the Michigan Health Council

Oct. 3	Michigan's Foremost Family Physician —1954	Duncan J. McColl, M.D., Port Huron Clarke M. McColl, M.D., Detroit
Oct. 10	Your Medicine Cabinet	Glenn E. Millard, M.D., Detroit
Oct. 17	The Common Cold	Francis P. Rhoades, M.D., Detroit
Oct. 24	Preparation for Surgery	John E. Hauser, M.D., Detroit
Oct. 31	Muscular Dystrophy	Mrs. G. Mennen Williams, Lansing Miss Iride M. Val Massy, Detroit Robert C. Beale, Detroit

* * *

Albert D. Reudemann, M.D., Detroit, is president of the American Society of Ophthalmologic and Otolaryngologic Allergy.

* * *

The Middle Section of the American Laryngological, Rhinological and Otological Society will meet in Detroit, at the Sheraton-Cadillac Hotel, January 24, 1955. The chairman of this meeting is French K. Hansel, M.D., St. Louis.

* * *

The American College of Chest Physicians held its 20th Annual Meeting in San Francisco, June 17-20, 1954. William A. Hudson, M.D., Detroit, was elected President.

* * *

At the Fifty-ninth annual meeting of the American Academy of Ophthalmology and Otolaryngology in New York, September 19 to 24, the following Michigan men were made Life Fellows: Austin F. Burdick, Lansing; Robert H. Fraser, Battle Creek; A. C. Furstenberg, Ann Arbor. The following were made Senior Fellows: Don A. Cohoe, Detroit; Andre John Cortopassi, Saginaw; George C. Hardie, Jackson; Dewey R. Heetderks, Grand Rapids; Oliver B. McGillicuddy, Lansing; Willis A. Potter, Detroit; Elmer L. Whitney, Detroit, and Arthur Paul Wilkinson, Detroit. Dr. A. C. Furstenberg, Ann Arbor, was made president-elect.

The September, 1954, issue of *The Journal of the American Women's Association* carried an article about Dr. Martha Wells Usher, who was number one scholastically in the graduating class of 153 students at the University of Michigan Medical School. Dean A. C. Furstenberg commented "This accomplishment in competition with the vast group of men is indeed outstanding. Only 5 per cent of the class were women."

* * *

Leo H. Bartemeier, M.D., Detroit, read a paper entitled "What Patients Expect of Their Physicians" at the annual meeting of the Wisconsin State Medical Society, on October 4 at Milwaukee, Wisconsin.

* * *

The October, 1954, *Journal of the Florida Medical Association* carries an editorial on the William Beaumont Memorial in which it says: "Behind the dedication of the Beaumont Memorial lies a decade of dreams, plans and work by Michigan doctors of medicine. Consummation of the project now brings to them the praise, the appreciation and the congratulations of their colleagues across the nation."

* * *

John S. DeTar, M.D., Milan, Michigan, presented a paper entitled "The Problems Facing Family Physicians Today" at the annual convention of the Indiana State Medical Association, October 27, 1954 at Indianapolis. This lecture was also presented to the Polk County Medical Society, Des Moines, Iowa, on October 20. An abstract of this talk appears in the *Polk County Medical Bulletin* for October, 1954.

* * *

Announcement of Medical meetings to be held in Europe in 1955:

May 23-26—Sixteenth Anniversary Meeting of International Surgical Congress, Geneva

July 12-14—Ciba Foundation Symposium on Bone Structure and Metabolism, London

July 18-23—Twelfth Congress of the International Association of Psychotechnology, London

July 24-31—Sixteenth Congress of the International Society of Surgery, Copenhagen

Sept. 10-15—World Medical Meeting, Vienna

DOCTOR LOCATIONS—OCTOBER, 1954

Placed by Michigan Health Council:

NAME	OPENS PRACTICE IN	APPROXIMATE DATE	FROM
F. Howard Hague, M.D.	St. Ignace	October 1	Nebraska
Earl Kieffer, M.D.	Kalamazoo	October 1	Dearborn
Assisted by Michigan Health Council:			
Edwin S. Woodworth, M.D.	Howell	September 1	Ann Arbor
Stuart L. Cohn, M.D.	Alpena	October 1	New Jersey
Robert G. Martin, M.D.	Charlevoix	October 1	Cheboygan
Robert Landick, M.D.	Saginaw	October 1	Boston, Massachusetts
Other Locations (from news clippings)			
Charles Stulik, M.D.	Union Pier	September 17	Chicago
Richard B. Michaelson, M.D.	Flint	October	Military Service

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Mark Nickerson, M.D., professor in the Medical School of the University of Michigan, was cited by the Clardy Committee of the House of Representatives in Washington at a hearing held in Lansing in May. Dr. Nickerson refused to answer questions about his having been a Communist. He cited the Fifth Amendment. The University had him investigated by a committee of the Medical School, by the President's Advisory committee, and by the Sub-committee on Academic Freedom and Integrity. The result was finally adjuged by the Board of Regents who voted seven to one for dismissal. He is now at the University of Manitoba, Winnipeg, Canada.

* * *

Promotions at University of Michigan.—In the Medical School the following doctors of medicine have been advanced to professor: Harry A. Towsley and Ernest H. Watson, both Pediatrics and Communicable Diseases. Advanced to associate professor are: Jere M. Bauer, Internal Medicine; William C. Baum, Surgery; Winthrop N. Davey, Internal Medicine; Bruce D. Graham, Pediatrics and Communicable Diseases; Gardner M. Riley, Obstetrics and Gynecology. Advanced to assistant professor are: Andrew J. B. Berger, Anatomy; Ronald C. Bishop, Internal Medicine; Robert J. Bolt, Internal Medicine; David G. Dickinson, Pediatrics and Communicable Diseases; Edward F. Domino, Pharmacology; Tommy N. Evans, Obstetrics and Gynecology; Mary O. Halverson, Bacteriology; Paul E. Hodgson, Surgery; Melvine Levine, Physiological Chemistry; Kenneth R. Magee, Neurology; Merle Mason, Biological Chemistry; Donald C. Overy, Internal Medicine and Cardiology; George C. Rinker, Anatomy; Saul Roseman, Biochemistry; Holbrook S. Seltzer, Internal Medicine; Jean H. Webster, Pathology; Walter N. Whitehouse, Radiology.

* * *

Samuel R. M. Reynolds, M.D., chief physiologist of the Department of Embriology of Carnegy Institute of Washington gave four lectures under the auspices of the Detroit Receiving Hospital and the Wayne University College of Medicine on November 11, and 12, 1954, constituting an exposition of his most recent researches: "Tokography; Technique and Results; Uterine Forces in Normal and Abnormal Labor;" "Ovarian Vasculature and Ovarian Function;" "Uterine Growth and Vasculature Supply in Pregnancy;" "Psyche Sedatives and Uterine Function; Stimulation of the Uterus in Labor," and "Fetal Distress; Physiologic Factors."

* * *

Hospital and Accident Insurance Companies.—The metropolitan newspapers of October 20, 1954, carried the announcement of action by the chairman of the Federal Trade Commission charging "false and misleading advertising." Seventeen companies were named in the proceedings, which came after a ten-month inquiry into hundreds of complaints. The provisions of the policies were misrepresented.

* * *

The U. S. Supreme Court on October 18 refused to review the constitutionality of the Doctor Draft Act. Action of the court came in denial of a petition for re-

view of the case of Dr. William R. Bertelsen of Neponset, Ill., who is currently performing the duties of a physician as an Army private. Selective Service and Defense Department records show the following: Dr. Bertelsen from August 1944 to December 1945 received medical training under the Navy's V-12 program, then went on inactive status until discharged in 1947. After he went on inactive status he completed medical training at his own expense. In May 1953 he was drafted as a private after declining a commission. He instituted legal proceedings, charging, among other things, that the doctor draft was unconstitutional. It reached the Supreme Court this month. The court gave no reason for its denial of the petition.

* * *

Hill-Burton projects currently total 2,308, at a total cost of $1.8 billion, with a federal share of $625 million. Included are 110,735 hospital beds and 487 health centers. (The new Hill-Burton program, to stimulate construction of other than complete hospitals, is just getting started this year.) . . . A bimonthly report of U. S. Operations Missions (conducted by Foreign Operations Administration) shows health training programs under way in 19 countries of the Near East, South Asia, Africa and the Far East.

* * *

The seventeenth International Congress of Ophthalmology was in three parts. On September 10 to 11, 1954, the meetings were at the University of Montreal and McGill University, in Montreal, Canada. On September 12 to 17, the sessions were at the Waldorf-Astoria Hotel in New York. The following doctors from Michigan took part in the program as indicated:

"The Ocular Manifestations of the Pulseless Syndrome," Raymond A. Pinkham, Ann Arbor;

"Criticisms of the Deturgescence Theory of Corneal Transparency," David G. Cogan, Boston, and V. Everett Kinsey, Detroit;

"The Fixed Cells and Nerves of the Human Cornea," K. Scharenberg, Ann Arbor;

"The Posterior Chamber and Aqueous Humor Dynamics," V. Everett Kinsey and Eric Palm, Detroit;

"The Morphology of the Nervous System of the Striated Muscles of the Human Eye," J. Reimer Wolter, Ann Arbor.

* * *

Dr. John S. DeTar, speaker, American Academy of General Practice—"The problems of attracting, training, and distributing young doctors of medicine in the field of general practice, together with provision of facilities for continuing education, inclusion on hospital staffs with individually appraised privileges, are not problems to be solved solely by the American Academy of General Practice. They are problems for the profession as a whole. It is heartening to witness the many-phased programs of medical educators, the state medical associations, and the American Medical Association focused on attaining these vital ends."—Quoted in AMA Secretary's letter September 13, 1954.

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President Eisenhower, in his Denver speech on August 23—"Now, we reject socialization of medicine. We don't believe in it. But we know, and everybody must know, that the U. S. and the people of the U. S. are going to have access to good medical facilities. And we are attempting to bring out a program, and we will bring out a program, that will make this possible. Scientific research will go on. . . . Health reinsurance we're going to put before the Congress again because we must have a means open to every American family so that they can insure themselves cheaply against the possibility of a catastrophe in the medical line."

* * *

Civil Service Commission breakdown of separation of employes from federal jobs in the 13-month period ending last July 1 discloses 53 persons dismissed in the Department of Health, Education, and Welfare for suspected subversion. A federal worker comes under this heading when his personnel file contains "information indicating, in varying degrees, subversive activities, subversive associations, or membership in subversive organizations." Another 131 HEW employes quit during the same period while their cases were under scrutiny. The commission said that included in this group were an undetermined number of employes who resigned without knowing their loyalty or character were being questioned. In all federal agencies, 1,743 were dismissed for subversion. Branches of government reporting no suspected loyalty cases were the Hoover Commission on Organization of the Executive Branch, the Federal Trade Commission, and the National Science Foundation.

* * *

Dr. James C. Sargent, of Milwaukee, chairman of the AMA Council on National Defense since 1947, died suddenly while attending a sectional urological meeting in Detroit on Thursday, October 7, at the age of sixty-two. He complained of chest pains upon awakening in the morning and died shortly thereafter of a heart attack in a Detroit hospital.

Dr. Sargent, who also served as vice chairman of the Health Resources Advisory Committee of the Office of Defense Mobilization, was one of the original members of the AMA Council when it was established in 1945 as the Committee on National Emergency Medical Service.

* * *

The next scheduled examination (Part I) of the American Board of Obstetrics and Gynecology written examination and review of case histories, for all candidates will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 4, 1955. Case Abstracts numbering twenty are to be sent by the candidate to the Secretary as soon as possible after receiving notification of eligibility to the Part I written examination.

Additional information may be obtained from the Office of the Secretary, Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

Cook County Graduate School of Medicine

INTENSIVE POSTGRADUATE COURSES

STARTING DATES, SPRING 1955

SURGERY—Surgical Technic, two weeks, January 24, February 7.
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, March 7
Surgical Anatomy and Clinical Surgery, two weeks, March 21
Surgery of Colon and Rectum, one week, February 28
Basic Principles in General Surgery, two weeks, March 28
General Surgery, two weeks, December 6, 1954; One Week, February 14
Gallbladder Surgery, ten hours, April 11
Fractures and Traumatic Surgery, two weeks, March 14
GYNECOLOGY—Office and Operative Gynecology, two weeks, February 14
Vaginal Approach to Pelvic Surgery, one week, February 7
OBSTETRICS—General and Surgical Obstetrics, two weeks, February 28
MEDICINE—Two-week Course May 2
Electrocardiography and Heart Disease, two weeks, March 14
Gastroenterology, two weeks, May 16
Gastroscopy, two weeks, March 21
RADIOLOGY—Diagnostic Course, two weeks, January 3
Clinical Uses of Radio Isotopes, two weeks, April 25
PEDIATRICS—Intensive Course, two weeks, April 4
Clinical Course, two weeks, by appointment
Cerebral Palsy, two weeks, June 13
UROLOGY—Two-week Urology Course, April 18
Ten-day Practical Course in Cystoscopy every two weeks

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Plan now to give yourself a holiday soon. You'll *like* Dearborn Inn, doctor! Advance reservations are advisable.

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Experimental Research into Problems of Aging.—The Trustees of the Ciba Foundation for the Promotion of International Co-operation in Medical and Chemical Research, wishing to encourage well-conceived research relevant to basic problems of aging, invite candidates to submit work in the field for awards for 1954-55.

Details of the conditions may be obtained on application to the undersigned, but in general candidates should note:

(a) Five awards, of an average value of £300 each, are available for the period 1954-1955. The announcement of awards will be made in July, 1955.
(b) Entries must be received by the undersigned not later than 28th February, 1955.
(c) Entries will be judged by an independent international panel of distinguished scientists who will advise the Executive Council of the Foundation on their findings and will also have power to recommend variation in the size and number of the awards according to the standard of entries. The decisions of the Executive Council will be final.
(d) In making the awards preference will be given to younger workers.
(e) The work submitted should be unpublished (but may be under consideration for publication) at the closing date for entries.
(f) The papers may be in the candidate's own language, but a summary in English not exceeding 500 words must be attached.
(g) Where there is one or more co-authors the name of the leading author should be indicated; it is to him that the award will normally be made, and it will be left to his discretion to share this award appropriately with his co-authors.

G. E. W. Wolstenholme,
Director and
Secretary to the Executive Council.

* * *

Fluoridation of water.—In the election just completed the question of fluoridation of drinking water was put up to the voters in several places in the United States. According to the Associated Press

"Communities in scattered areas from coast to coast overwhelmingly turned down proposals to add fluoride to their drinking water systems, the election results show.

"Proponents have claimed fluoride in the drinking water helps combat tooth decay, while opponents say the chemical has not been proven absolutely safe.

"Only at Mountain Home, Ark., did the voters support the fluoridation plan, and by a margin of 290-209. The town will appropriate $2,500 to put the proposal into effect.

"Salem, Ore., voted against putting fluorine in its water, 7,713 to 5,686.

"Meadville, Pa., turned it down 3,696 to 1,146.

"Greensboro, N. C., citizens gave fluoride a turndown by 5,545 to 4,326. The city council recently discontinued fluoridation, started two years ago, until a vote could be taken. The vote is not binding on the council.

"Birmingham, Ala., with returns in from 102 of 112

ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

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ballot boxes, decided a long debate on fluoridation by defeating the issue, 11,393 to 7,220.

"Atlantic City, N. J., voters turned down a fluoridation plan by a 3 to 2 margin."

* * *

Fluorine.—Small amounts of fluoride are generally present in plant and animal tissues, especially bones and teeth. No conclusive evidence that fluorides have essential function in nutrition has been adduced. However, extensive evidence indicates that during tooth development controlled intake of fluoride, such as provided by drinking water containing about one part per million, results in substantial protection against dental caries. This practice is recognized as an important public health measure.—*Dairy Council Digest,* November, 1954.

* * *

The Armed Forces Medical Library Catalog, 1950-1954, will be published in the fall of 1955. The six-volume set (about 750 pages per volume) will be published by J. W. Edwards, and is priced at $64 for the set, f.o.b Grand Rapids, Michigan.

The 1950-1954 *Catalog* will supersede the annual volumes for 1950-1953. In addition, it will include the record of cataloging done at the Armed Forces Medical Library in 1954 and a large portion of cataloging completed to date in the History of Medicine Division. All of the information will be presented in two alphabetical arrangements, one for authors and the other for subjects. (The subject index to the 1950 volume will be expanded into a complete subject catalog with full bibliographical information under each entry.)

* * *

The St. Clair County Medical Society held its Tenth Annual Clinic Day in Port Huron on September 17, 1954.

NOTICE

The Michigan Chapter of the American College of Surgeons will meet on March 8, 1955, the day before the Michigan Clinical Institute at the Sheraton-Cadillac Hotel, Detroit, for a day of interesting papers and discussions, as well as a banquet in the evening to renew friendships, and to discuss common problems with your fellow colleagues. A good program is in the making, and we expect to have an outstanding speaker for the evening gathering. Bring yourself, tell your friends, and if you have a deserving resident in your hospital treat him to a pleasant clinical day, as well as a pleasant evening to stimulate and encourage him in his endeavors. We look for a big turnout and a profitable time. Any questions or communications may be addressed to the Secretary-Treasurer, Dr. John Reid Brown, 706 Maccabees Building, Detroit, Michigan.

MOUNT CARMEL MERCY HOSPITAL—SIXTEENTH ANNUAL CLINIC DAY

January 26, 1955

Morning Session—9:00 A.M.

JOHN W. HUFFMAN, M.D.
Associate Professor of Obstetrics and Gynecology, Northwestern University, Chicago, Illinois
"Urogenital Fistula: Diagnosis and Treatment"

ROBERT E. GROSS, M.D.
Ladd Professor of Children's Surgery, Harvard Medical School, Boston, Massachusetts
'Some Pediatric Surgical Problems"

HENRY I. BOCKUS, M.D.
Professor and Chairman, Department of Medicine, University of Pennsylvania, Philadelphia, Penn.
"Functional Disorders of the Digestive Tract"

J. WILLIAM HINTON, M.D.
Professor and Chairman, Department of Surgery, New York University, Post-Graduate Medical School, New York, N. Y.
"Experimental and Clinical Data Determining the Operation of Choice in Duodenal Ulcer"

Luncheon—12:30 P.M.

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GORDON H. SCOTT, PH.D.
Dean, Wayne University, College of Medicine, Detroit, Michigan
"Interpretation of Medical Education"

Afternoon Session—1:45 P.M.

IRVING S. WRIGHT, M.D.
Professor of Clinical Medicine, Cornell University Medical College, New York, N. Y.
"Cerebral Vascular Diseases—Their Significance, Diagnosis and Modern Therapy"

BRADLEY I. COLEY, M.D.
Professor of Clinical Surgery, New York Medical College, New York, N. Y.
"Malignant Transformation Occurring in Benign Lesions of Bone"

CHARLES B. PUESTOW, M.D.
Clinical Professor of Surgery, University of Illinois, College of Medicine and Graduate School, Chicago, Illinois
"Benign Pancreatic Disease"

Scientific Exhibits

"An Exhibit of Unusual and Interesting Cases"

Lawrence Wm. Gardner, M.D., Director of Laboratories, takes pleasure in presenting a pathological review of UNUSUAL AND INTERESTING CASES observed during the past year in our Institution. These entities will be exhibited in easel type view boxes, each containing twelve Kodachrome (5 x 7 inches) transparencies. A portion of the display will consist of stereoscopic Kodachromes.

"The Hemogram in Review"

James G. Wolter, M.D., Associate Director of Laboratories, will present a scientific exhibit in the field of Clinical Hematology to acquaint physicians with the numerous individual tests incorporated in the HEMOGRAM. The development of this type of hematological survey represents another advance in our diagnostic armamentarium. Typical blood disorders will be shown.

"Research Committee Exhibit"

The Research Committee will present the following phases of its work performed during 1954.

The Experimental Surgical Laboratory Projects will include:

1. Metallic oral prosthesic implants (Leon Herschfus, D.D.S.)
2. Hypothermic anesthesia (Sister M. LaSalette, R.S.M.)
3. Surgery of coronary heart disease (James D. Fryfogle, M.D.)
4. Fetal urine formation and its relationship to toxemia. (Harold L. Morris, M.D.)

The Clinical Water Balance Program will be demonstrated by slides and technical demonstrations (E. G. Bovill, M.D. and R. D. Tupper, M.D.).

Two conducted tours of the Physiologic Laboratory and of the Experimental Surgical Laboratories will be given.



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The American Medical Education Foundation recently received a gift of $2,000 from the American College of Radiology. The ACR has received two Awards of Merit for outstanding contributions to the AMEF program.

* * *

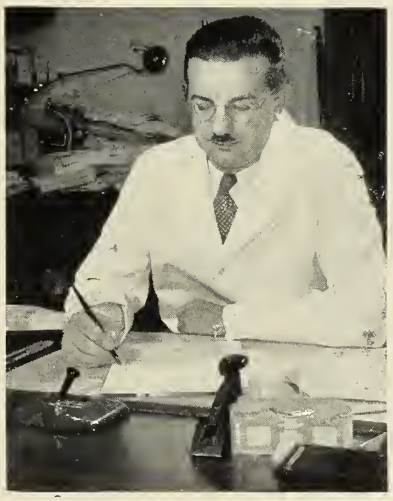
C. E. Dutchess, M.D., New York (formerly of Michigan), will open private consultant service to Schenley Laboratories and to the drug and chemical industry. After practicing private medicine in Detroit, starting in 1921, he joined the professional service and advertising department of Parke-Davis in 1932, and remained until 1944 when he began his association with Schenley Laboratories.

* * *

James C. Sargent, M.D., Milwaukee, Wisconsin, Chairman of the Council on National Defense of the American Medical Association, died suddenly of a heart attack while attending a sectional urological meeting in Detroit on October 7.

* * *

The 1955 Easter Seal campaign will open on Thursday, March 10, and continue through Easter Sunday, April 10. In 1954 the Easter Seal Society served 118,445 crippled persons—an increase of 15 per cent over the previous year. Nearly 100,000 of these were children under the age of 21.



C. Allen Payne, M.D., Grand Rapids, will serve as Chairman of Arrangements for the 1955 Annual Session of the Michigan State Medical Society scheduled for the Civic Auditorium - Pantlind Hotel, Grand Rapids, September 28-29-30, 1955.

* * *

At its recent meeting, the **Michigan Academy of General Practice** elected the following Officers: Kenneth W. Toothaker, M.D., Lansing, President; Russell F. Fenton, M.D., Detroit, President-Elect; E. C. Long, M.D., Detroit, Secretary-Treasurer; and Directors F. G. Swartz, M.D., Traverse City and Joseph Hickey, M.D., Detroit. Delegate to the national Academy will be J. S. DeTar, M.D., Milan and Karl L. Swift, M.D., Detroit, is the Alternate.

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At the recent meeting of the **American Cancer Society** in New York, L. E. Holly, M.D., Muskegon, was elected Medical Director of Region No. 4; H. M. Nelson, M.D., Detroit, Director at Large; Wm. A. Hyland, M.D., Chairman of the Medical and Scientific Executive Committee and Mr. Don E. Johnson of Flint, Director at Large.

* * *

The University of Michigan and MSMS have joined to sponsor "Gerontology: Medicine's Responsibility to Older People," a special three-day course for doctors of medicine on the University campus January 13, 14 and 15, 1955.

Among the topics to be covered by speakers and group discussion are "What Is Aging?", "Clinical Problems Associated with Aging," "Preventive Geriatrics," and "The Physician's Role in the Community."

Representing MSMS on the Planning Committee are Co-chairman S. C. Wiersma, M.D.; A. Hazen Price, M.D., and F. C. Swartz, M.D. Representing the University are Co-chairman O. T. Mallery, Jr., M.D.; L. Fred Bissell, M.D.; Vlado A. Getting, M.D., and Wilma T. Donahue, Ph.D.

Units within the University participating in sponsorship are the Medical School, Institute of Industrial Health, Post-graduate Medicine, School of Public Health, and Division of Gerontology.

* * *

"Lung Cancer—the Problem of Early Diagnosis" is the title of an important new professional educational film, sponsored by the American Cancer Society and shown for the first time at the ACS convention, October 20, 1954. This film, emhasizing the need for early detection, was produced for the medical profession primarily.

For a copy of this film, write ACS, 47 Beaver Street, New York, New York.

* * *

Albert C. Furstenberg, M.D., Ann Arbor, was named President-Elect of the American Academy of Ophthalmology and Otolaryngology at the recent annual meeting of the Academy held in New York City. Dr. Furstenberg will take office January, 1956.

Dr. Furstenberg, who is Dean of the University of Michigan Medical School, is a native of Michigan and was graduated from the U. of M. in 1915. Rising through the ranks, he became a full professor in 1932 and Dean in 1935. He is a Past President of the American Laryngological, Rhinological and Otological Society (1946), of the American Otological Society (1952), also of the Association of American Medical Colleges (1945) and a present member of the American Board of Otolaryngology.

Congratulations, Dr. Furstenberg!

* * *

Morton Hack, Hack Shoe Company, was re-elected president of the Michigan Shoe Retailers Association at its annual convention in Detroit in November.

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The March of Dimes.—For seventeen years the National Foundation for Infantile Paralysis has engaged in a nationwide program to insure that those stricken with poliomyelitis have the best possible medical care.



The National Foundation's patient aid program provides assistance to all poliomyelitis patients who need a helping hand—regardless of race, color or creed. Over $203,000,000 has already been used in this program—money for hospital bills, professional care and needed equipment.

Tens of millions of dollars also have been allocated for basic virology research and research into causes, treatment and prevention of poliomyelitis; plus funds for the professional education of physicians, nurses, physical therapists and other specialists to meet the ever-increasing needs for their services.

More recently, trials of a polio vaccine developed by Dr. Jonas E. Salk were held to test this hoped-for preventive against paralytic poliomyelitis. The evaluation study on this vaccine is being conducted by Dr. Thomas Francis, Jr., of the University of Michigan.

These programs have been made possible only because the American public has wholeheartedly supported the March of Dimes, held every January to raise funds for these and other projects. The need in 1955 is $64,000,000.

DIGEST OF PROCEEDINGS

(Continued from Page 1412)

that there was not much ammunition to get fired up about; more than that, I think we have had some splendid committees this year, who expedited our work with a minimum of effort on the floor. I think your expression also should be directed to them.

At this time I would like to call all of the Past Presidents who are in the room to come forward and be recognized. I don't know how many are here, so I will read the names and ask them to come to the front of the room.

(The Past Presidents in attendance came forward and were recognized.) *(Applause)*

THE SPEAKER: In concluding this session I would like especially to thank all of the staff of the executive office for the hard work they put in—Dr. Foster, Mr. Burns, Bob Roney and their associates, Mr. Brenneman, and the secretarial staff. It was really quite a workout for them, and we appreciate it very much.

Also, once again, many thanks to the fine committees and the chairmen, whose work has made this House of Delegates run so smoothly.

Also, thanks once again to all of you for your help in expediting things on the floor and for your expression of confidence.

Last, but far from least, I want to thank the Vice Speaker for his immense help throughout this session of the House of Delegates.

We now have the result of the balloting. Elected were the following, in order of seniority: G. W. Slagle, M.D., C. I. Owen, M.D., and J. R. Rodger, M.D.

The 89th session of the House of Delegates now stands adjourned.

(The meeting adjourned sine die at 9:50 p.m.)

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

USES OF WINE IN MEDICAL PRACTICE, A Summary. This summary of the uses of wine in medical practice is published by the Wine Advisory Board, an agricultural industry administrative agency established and operating pursuant to the Marketing Order for Wine, issued and made effective under the authority of the California Marketing Act of 1937. San Francisco: Wine Advisory Board.

* * *

NEW AND NONOFFICIAL REMEDIES. Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1954. Issued under the direction and supervision of the Council on Pharmacy and Chemistry, American Medical Association. Philadelphia, London, Montreal: J. B. Lippincott Company, 1954. Price $2.65.

* * *

ANNUAL REPORT. For the Fiscal Year, September 1, 1952-August 31, 1953 W. K. Kellogg Foundation, Battle Creek, Michigan.

* * *

EPIDEMICS IN COLONIAL AMERICA. By John Duffy. Baton Rouge: Louisiana State University Press. Price $4.50.

* * *

CLINICAL CARDIOLOGY. Edited by Franklin C. Massey, A.B., M.D., Assistant Professor of Medicine, Hahnemann Medical College, Philadelphia, Pennsylvania. Baltimore, Maryland: The Williams & Wilkins Co., 1953. Price $13.50.

* * *

SALT AND THE HEART. By E. T. Yorke, M.D., Attending Cardiologist, Alexian Brothers Hospital; Associate Cardiologist, St. Elizabeth Hospital; Dispensary Physician, Elizabeth General Hospital, Elizabeth, N. J.; Consultant in Medicine, Rahway Hospital, Rahway, New Jersey. Linden, New Jersey: Drapkin Books. Price $3.45.

* * *

SYNOVIAL FLUID CHANGES IN JOINT DISEASE. By Marian W. Ropes, M.D., Associate Physician Massachusetts General Hospital and Assistant Clinical Professor of Medicine, Harvard Medical School, and Walter Bauer, M.D., Chief of Medical Services, Massachusetts General Hospital, Jackson Professor of Clinical Medicine and Director of Robert W. Lovett Memorial Foundation for the Study of Crippling Disease, Harvard Medical School. Published for the Commonwealth Fund. Cambridge: Harvard University Press, 1953.

* * *

THERAPEUTICS IN INTERNAL MEDICINE. By Eighty-four authorities, Edited by Franklin A. Kyser, M.D., F.A.C.P., Assistant Professor of Medicine, Northwestern University Medical School, Chicago; Attending Physician, Evanston Hospital, Evanston, Illinois. Second Edition, completely revised. New York: Hoeber-Harper Book. Price $15.00.

* * *

THE EPIDEMIOLOGY OF HEALTH, A New York Academy of Medicine Book. By Iago Galdston, M.D., editor, Published by Health Education Council, New York, 1953, Minneapolis.

Say you saw it in the Journal of the Michigan State Medical Society



HISTOLOGY. By Arthur Worth Ham, M.B., F.R.S.C., Professor of Anatomy in charge of Histology, in the Faculties of Medicine and Dentistry, University of Toronto, Toronto, Canada. 518 figures, including 7 plates in color. Second Edition. Philadelphia: J. B. Lippincott Co., Price $10.00.

* * *

REHABILITATION OF THE OLDER WORKER. Edited by Wilma Donahue, James Rae, Jr., and Roger B. Perry, with a foreword by Everett J. Soop. Ann Arbor: University of Michigan Press, 1953. Price $3.25.

* * *

DISEASES OF WOMEN. By Robert James Crossen, A.B., M.D., F.A.C.S., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine; Section Head of Unit 1 Obstetrics and Gynecology, St. Louis City Hospital; Assistant Gynecologist and Obstetrician to Barnes Hospital and St. Louis Maternity Hospital; Assistant Gynecologist to St. Louis Children's Hospital, Gynecologist and Obstetrician to St. Luke's Hospital; Member of the American Academy of Obstetrics and Gynecology, Central Association of Obstetricians and Gynecologists, American Radium Society, American Society for the Study of Sterility, International Fertility Association; Diplomate of the American Board of Obstetrics and Gynecology. Tenth Edition. 990 illustrations including 41 in color. St. Louis: The C. V. Mosby Company. Price $18.50.

* * *

THE DEAF AND THEIR PROBLEMS. A study in special education by Kenneth W. Hodgson, M.A. (Cantab). With a Preface by Sir Richard Paget, Bart, Fellow of the Physical Society, et cetera and author of "Human Speech." Price $6.00. New York: Philosophical Library.

This is a remarkable book about the deaf, giving a history of deafness through the ages telling what has been accomplished and giving a very complete description of our modern concept of the deaf child, his recognition and treatment. In this book also is contained the very latest scientific information as to the care of the older person.

There is a section on parents and children, teachers, and one on schools giving very much hope in this problem. The book is well worth reading, not only by otologists, but by every doctor of medicine, especially those dealing with children.

* * *

SMOKING AND CANCER. A Doctor's Report. By Alton Ochsner, M.D. New York: Julian Messner, Inc. Price $2.00.

Dr. Alton Ochsner, a non-smoker, after considering his studies and experience with lung cancer, has written a little book of seventy-two pages which every smoker should read and consider. Evidence is presented that use of tobacco increased susceptibility to not only cancer, but coronary heart disease. There are sixteen chapters, every one stimulating: Smoker's Choice; Smoked Mice and Smoking Men; Smoking and Sex; Smoking; Deadly Accomplice of Heart Disease; You Can Stop Smoking; How Smokers Can Minimize Their Health Risks. The book takes about a couple of hours to read, and is not specified for the lay people, but is non-technical.—W.H.

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A PAGE FROM MEDICAL HISTORY

(Continued from Page 1350)

they apparently did not make much headway in the field of medicine. Their life centered around their temples. "Certain of their religious beliefs, echoed in the Bible, have enormously influenced human thought and are still alive today" (University Museum, Philadelphia).

References

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7. University Museum, Philadelphia.
8. Woolley, C. L.: Ur Excavations, The Royal Cemetery. Text and Plates, 1934. Sold by The University Museum, Philadelphia.
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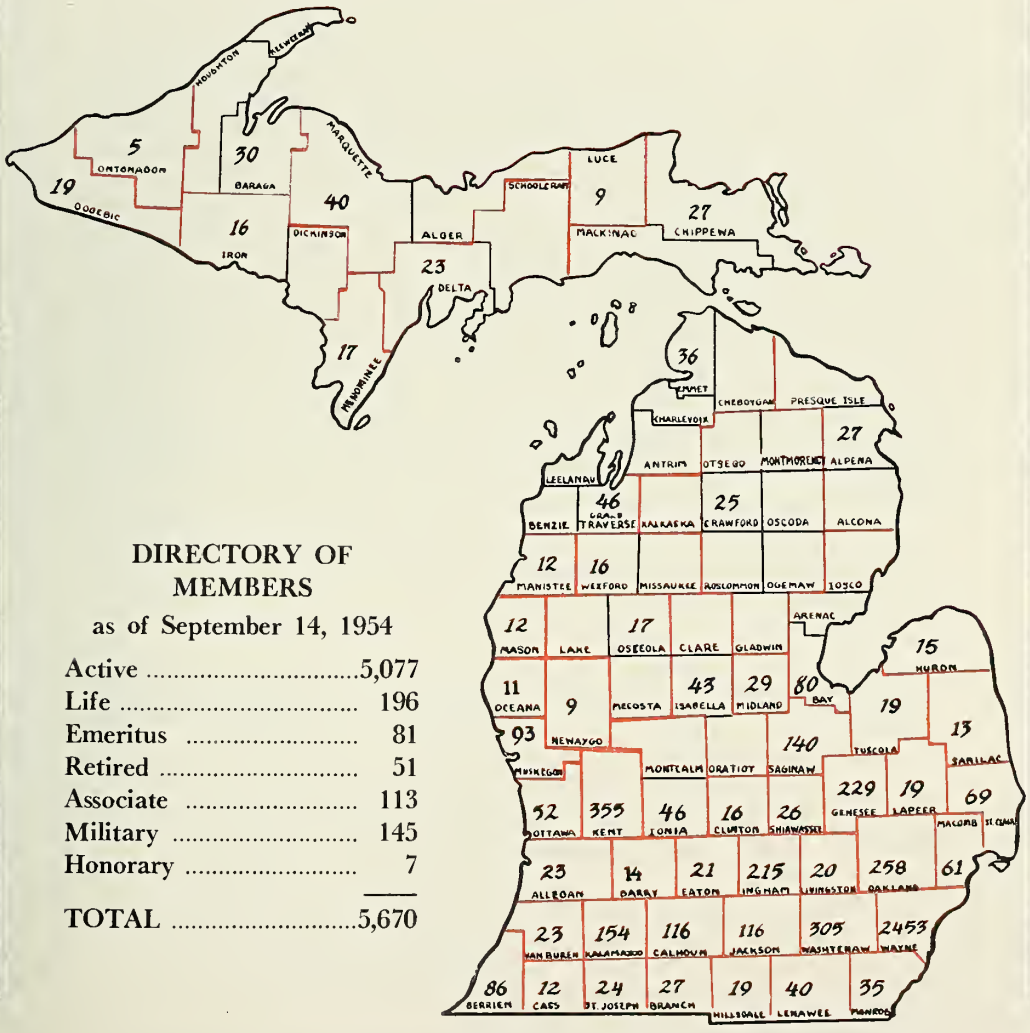
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Roster Section—1954



DIRECTORY OF MEMBERS

as of September 14, 1954

Active	5,077
Life	196
Emeritus	81
Retired	51
Associate	113
Military	145
Honorary	7
TOTAL	5,670

Membership Totals of Component County Medical Societies

In 1953

BLUE CROSS-BLUE SHIELD benefits for 535,419 Michigan people amounted to over $25,000,000 for doctors' services and more than $65,000,000 for hospital services!

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Roster 1954

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" for Retired Members; "A" for Associate Members; "M" for Military Members; all others are Active Members).

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Miller, K. C.....Saugatuck
Mitchell, A. B.....Allegan
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Urmston, Paul R.....303 Davidson Bldg., Bay City
Warren, E. C. (E).....1100 Fifth, Bay City
Wilcox, James W.....1115 Fifth Ave., Bay City
Wilson, Thomas G.....900 N. Jackson, Bay City
Woodburne, H. L.....Davidson Bldg., Bay City
Wright, T. B. (M).....101 W. John St., Bay City
Zaremba, Aloysius J.....108 S. Madison Ave., Bay City
Ziliak, Lawrence A., Jr.....707 N. Lincoln, Bay City

BERRIEN COUNTY

Anderson, Bertha M.G.....262 Pleasant St., Benton Harbor
Bailey, John H.....204 Fidelity Bldg., Benton Harbor
Bliesmer, A. F.....505 Pleasant St., St. Joseph
Bronfenbrenner, Jack....316 Fidelity Bldg., Benton Harbor
Burrell, H. J.....983 Ogden, Benton Harbor
Bush, C. W.....County Hospital, Berrien Center
Butler, W. J.....519 Ship St., St. Joseph
Cawthorne, H. J.....239 Pipestone, Benton Harbor
Coffelt, Carl F., Jr., (M).....
Conybeare, R. C.....416 Fidelity Bldg., Benton Harbor
Conway, Joseph.....Watervliet
Cooper, Leroy G.....903 Wisconsin Ave., St. Joseph
Cowdery, K. H.....1600 Niles, St. Joseph
Crowell, Richard C.....519 Ship St., St. Joseph
Dalgleish, A. J.....460 N. Main St., Watervliet
Dunnington, Ruel N.....143 Pipestone, Benton Harbor
Eidson, Hazel D.....Berrien Springs
Elliott, J. Colin.....207½ E. Front St., Buchanan
Emery, C. S.....1020 Niles St., St. Joseph
Emery, William K. (M).....1020 Niles Ave., St. Joseph
Faber, Michael.....209 State Bank Bldg., Benton Harbor
Fattic, G. R., Jr.....61 N. St. Joseph St., Niles
Feeley, M. J. (M).....505 Pleasant St., St. Joseph
Feldmann, Robert J.....P.O. Box 124, Bridgman
Foucek, B. C.....4 Maple St., Three Oaks
Friedman, M. E.....Box 87, New Buffalo
Galles, James O.....Coloma
Garrett, Evan L.....204 Starr Bldg., Niles
Gillette, Clarence.....Niles
Green, Barbara.....2600 Morton Ave., St. Joseph
Green, R. L.....2600 Morton St., St. Joseph
Gustin, R. D.....100½ Ferry St., Berrien Springs
Haglin, John J.....1 S. Fifth St., Niles
Harper, Ina M.....190 Michigan Ave., Benton Harbor
Harrison, L. L.....304 Main St., Niles
Hart, Russell T.....7 South Seventh St., Niles
Hassan, D. Kent.....115½ E. Front St., Buchanan
Hayes, Thomas P.....922 Main St., St. Joseph
Helkie, William L. (E).....
203 S. Ironwood Drive, South Bend, Ind.
Henderson, Fred C.....107 N. Second, Niles
Hershey, N. J.....1648 Broadway, Niles
Holt, Robert E., Jr.....107 N. Second, Niles
Howard, F. W.....131 E. Main St., Benton Harbor
Huff, H. D.....126 E. Main St., Niles
Irgens, Edwin.....11 Peoples State Bank, St. Joseph
Johnston, William H.....505 Pleasant St., St. Joseph
Kelsall, H. I.....1600 Niles, St. Joseph
Kennedy, Francis A.....239 Pipestone St., Benton Harbor
King, B. B.....210 Fidelity Bldg., Benton Harbor
King, Frank A., Jr.....610 Fidelity Bldg., Benton Harbor
Klos, Henry J.....Mercy Hospital, Benton Harbor
Landgraf, R. L.....107 N. Second St., Niles
Lawton, Clare V.....610 Fidelity Bldg., Benton Harbor
Leep, J. H. (M)....759 College Ave. S.E., Grand Rapids
Leva, John B.....312 Fidelity Bldg., Benton Harbor
Lindenfeld, Frederick H.....8 N. St. Joseph, Niles
Lininger, R. E.....700 Empire Ave., Benton Harbor
Louisell, C. T. (M).....
Naval Air Station, Quonset Point, R. I.
Manning, John T.....922 S. Main St., St. Joseph
McNabb, Arthur A.....469 Main St., Watervliet
Miller, E. A.....State Bank Bldg., Berrien Springs
Moore, T. Scott.....107 N. Second St., Niles
Ozeran, Charles J.....98 Water St., Benton Harbor
Padelford, Wm. J.....922 Main St., St. Joseph
Parker, L. B. (M).....3555 Leyden, Denver, Colo.
Polansky, Sanford.....84 West Main St., Benton Harbor
Porter, C. B.....170 Wall St., Benton Harbor
Pritchard, Harold M.....1 S. Fifth St., Niles
Rague, P. O.....Mercy Hospital, Benton Harbor
Ray, Dean K.....617 Elm St., St. Joseph
Reagan, Robert E.....190 Michigan St., Benton Harbor
Rice, Franklyn A., Sr.....324 N. Fourth St., Niles
Rice, Franklyn G., Jr.....324 N. Fourth St., Niles
Richmond, D. M.....314½ State St., St. Joseph
Ruth, J. G.....190 Michigan Ave., Benton Harbor
Skinner, J. W. (M).....
2401 Dickey Rd., Thomas Woods No. 1
Augusta, Ga.
Sowers, Bouton F.....210 Fidelity Bldg., Benton Harbor
Strayer, John W.....107 N. Second St., Niles
Strick, Marvin H.....311 Fidelity Bldg., Benton Harbor
Swingle, Alvin J.....84 W. Main, Benton Harbor
Thorup, D. W.....610 Fidelity Bldg., Benton Harbor
Urist, Maurice D.....454 Pipestone, Benton Harbor
Vastine, Russell J., Jr.....113 N. Portage, Buchanan
Westervelt, H. O.....539 Pearl St., Benton Harbor
Winegar, A. C.....190 Michigan Ave., Benton Harbor
Woodford, Hackley E.....191 Michigan, Benton Harbor

BRANCH COUNTY

Aldrich, Napier S.....15 E. Pierce St., Coldwater
Andrews, Frank A.....
State Home & Training School, Coldwater
Bailey, James E.....292 E. Chicago St., Coldwater
Beck, Perry C.....235 N. Walker St., Bronson
Bien, Walter J.....2 W. Chicago St., Coldwater
Coates, C. A.....Chicago St., Quincy
Culver, Bert W.....78 Division, Coldwater
Culver, Dean T.....78 Division, Coldwater
Fraser, R. J.....22 W. Pearl St., Coldwater
Gomley, Henry C.....108 E. Chicago, Bronson
Harris, D. M.....35 S. Sprague St., Coldwater
Heffelfinger, J. C.....292 E. Chicago St., Coldwater
Leitch, R. M.....304 N. Broadway, Union City
McLain, R. W. (L).....37 Janoah Ave., Battle Creek
Meier, H. J.....87 W. Pearl St., Coldwater
Mitchell, H. C.....State Home & Trg. School, Coldwater
Mooi, H. R.....292 E. Chicago St., Coldwater
Moss, H. L.....292 E. Chicago St., Coldwater
Nettleman, W. E.....87 W. Pearl St., Coldwater
Parsons, R. J.....304 N. Broadway St., Union City
Rees, Kendall B.....State Home & Trg. School, Coldwater
Rennell, E. J.....Box 148, Coldwater
Rick, J. J.....50 Division St., Coldwater
Thomas, J. A.....18 N. Monroe St., Coldwater
Wade, R. L. (L).....116 E. Chicago St., Coldwater
Walton, N. J.....61 E. Chicago St., Quincy
Weidner, H. R.....50 Division St., Coldwater

CALHOUN COUNTY

Amos, Norman H...1704 Wolverine Tower, Battle Creek
Anderson, Harold E.....501 Post Bldg., Battle Creek
Barden, Stuart P.....
Leila Y. Post Montgomery Hosp., Battle Creek
Baribeau, Roy H.....531 Post Bldg., Battle Creek
Becker, Harry F.....Route 3, Box 303A, Battle Creek
Beuker, Herman.....120 E. Mich Ave., Marshall
Bodine, Harold R.....
716 Michigan National Bank Bldg., Battle Creek
Bonifer, Philip P.....1008 Wolverine Tower, Battle Creek
Brainard, C. W...1002 Security Bank Bldg., Battle Creek
Brown, R. W.....140 Capital Ave. N.E., Battle Creek
Campbell, A. F.....103 E. Mulberry St., Albion
Campbell, Jack....611 Michigan Nat. Bank, Battle Creek
Campbell, Richard J.....140 Capital Ave., Battle Creek
Capron, Manley J.....618 Post Bldg., Battle Creek
Chandler, E. M.....1407 Security Bank Bldg., Battle Creek
Chynoweth, W. R.....207 Post Building, Battle Creek
Colquhoun, G. F.....401 Security Tower, Battle Creek
Cooper, J. E. (L).....298 W. Van Buren, Battle Creek
Curry, Robert K.....Homer
Diamante, Paul J.....1704 Wolverine Tower, Battle Creek
Dickson, A. R.....1002 Sec. Bank Bldg., Battle Creek
Dodge, Warren M., Jr.....
1207 Wolverine Tower, Battle Creek
Fairbanks, Stephen.....
306 S. Superior, P.O. Box 67, Albion
Ferazzi, P. S. (M)....140 Capital Ave. N.E., Battle Creek
Finch, D. L.....719 S.W. Capital Avenue, Battle Creek
Forsyth, J. E.....217½ S. Superior St., Albion
Fraser, Robert H.....
1112 Security Bank Bldg., Battle Creek
Funk, L. D.....133 W. Burr Oak, Athens
Gething, Joseph W. (L).....
803 Security Bank Bldg., Battle Creek
Giddings, A. M.....226 Battle Creek San, Battle Creek
Gilfillan, Margery J. (L).....
Battle Creek San., Battle Creek
Gorsline, C. S. (L).....85 Orchard Place, Battle Creek
Graubner, F. L.....Marshall
Hamady, Alfred....140 Capital Ave., N.E., Battle Creek
Hansen, Harvey C.....417 Post Building, Battle Creek
Hansen, E. L.....216 North Ave., Battle Creek
Haughey, Wilfrid (L).....610 Post Building, Battle Creek
Heald, C. W. (L).....67 Oaklawn, Battle Creek
Henderson, Philip M.....109 West Erie St., Albion
Herzer, Henry A. (L).....208 Irwin Ave., Albion
Hibbs, Donald K.....622 Post Building, Battle Creek
Holtom, B. G.....815 Security Bank Bldg., Battle Creek
Hoyt, A. A. (L)....141 N. Merwood Drive, Battle Creek
Hubly, James W...1407 Sec. Nat Bk. Bldg., Battle Creek
Humphrey, Arthur A.....
914 Security Bank Bldg., Battle Creek
Humphrey, A. E.....122 N. Madison, Marshall
Jeffrey, J. R.....Battle Creek San., Battle Creek
Jones, A. H.....VA Hosp., Fort Custer
Jones, T. K.....118 W. Green St., Marshall
Keagle, Leland R.....196 North Ave., Battle Creek
Keeler, K. B.....205½ S. Superior St., Albion
Kelleher, George T.....613 Post Bldg., Battle Creek
Kimball, A. S., Jr.....
196 Capital Ave., NE., Battle Creek
Kinde, M. R.....48 Merwood Drive, Battle Creek
Kingsley, Paul C...1407 Security Bank Bldg., Battle Creek
Kolvoord, Theodore.....
505 Security Bank Bldg., Battle Creek
LaFrance, N. F.....VA Hosp., Fort Custer
Lam, Francis L.....409½ Capital, SW, Battle Creek
Lancaster, Vance B...1206 Security Tower, Battle Creek
Levy, Joseph, Jr.,....1208 Wolverine Tower, Battle Creek
Lewis, W. B.....367 Champion, Battle Creek
Lowe, Kenneth.....1014 Security Bank Bldg., Battle Creek
Lowe, Stanley T...1009 Security Bank Bldg., Battle Creek
MacGregor, Archibald E. (L).....
1510 Security Bank Bldg., Battle Creek
McCuaig, A. G...719 S.W. Capital Avenue, Battle Creek
McNair, L. N.....205½ S. Superior, Albion
Meister, F. O.....806 Security Tower, Battle Creek
Melges, Fred J.....1506 Security Bank Bldg., Battle Creek
Mercer, C. M.....
512 Michigan Nat. Bank Bldg., Battle Creek
Mitton, O. W.....Battle Creek Sanitarium, Battle Creek
Morrison, Donald B.....
719 S.W. Capital Ave., Battle Creek
Mullenmeister, Hugh F...275 Capital, N.E., Battle Creek
Mustard, Russell L.....
1407 Security Bank Bldg., Battle Creek
Parkinson, Charles E.....Leila Hospital, Battle Creek
Patrick, Gilbert T...505 Security Bank Bldg., Battle Creek
Pearson, Donald J.....302 Post Bldg., Battle Creek
Power, J. R.....140 Capital Ave. N.E., Battle Creek
Robbert, John.....1407 Security Tower, Battle Creek
Roberts, E. H.....San Antonio State TB Hospital.,
P.O. Box 7206, Hackberry Sta., San Antonio, Texas
Robins, Hugh B.....237 Fremont, Battle Creek
Rorich, Wilma Weeks.....
166 Capital Ave. N.E., Battle Creek
Rosenfeld, J. E.....158 Capital, N.E., Battle Creek
Royer, Clark W.....1508 Wolverine Tower, Battle Creek
Rowan, Russell C.....205½ S. Superior, Albion
Schwarz, Frank W.....31 Orchard Place, Battle Creek
Sharp, A. D.....308 S. Superior, Albion
Shellenberger, Herbert M...108½ W. Michigan, Marshall
Shipp, Leland P...1414 Security Bank Bldg., Battle Creek
Sibilsky, A. C.....900 Wolverine Tower, Battle Creek
Simpson, Robert S...1507 Wolverine Tower, Battle Creek
Slagle, George W.....140 N.E. Capital, Battle Creek
Sleight, J. D.....401 Security Bank, Battle Creek
Stadle, W. H.....607 Jennings Landing, Cognac Lake,
Battle Creek
Stifel, Richard A.....1407 Sec. Bank Bldg., Battle Creek
Strohmenger, Frank J.....400½ S. Superior St., Albion
Swartz, George K.....Battle Creek San., Battle Creek

Tannenholz, Harold S.....
1614 Security Bank Bldg., Battle Creek
Taylor, Clifford B.....308½ S. Superior St., Albion
Tazelaar, M. A.....219 N. Madison, Marshall
Teter, L. F.....Pekin, Illinois
Upson, W. O. (L).....422 S. Freeman, Oceanside, Calif.
VanderVoort, Wm. V. (L).....
Battle Creek San., Battle Creek
Verity, Lloyd.....806 Security Tower, Battle Creek
Waid, Margaret E.....Community Hospital, Battle Creek
Walker, Charles S.....709 W. Van Buren, Battle Creek
Walters, John F.....41 N. Washington, Battle Creek
Way, Kenneth E.....315 N. Madison St., Marshall
Wemmer, Keith....1501 W. Michigan Ave., Battle Creek
Wencke, Carl G...1015 Security Bank Bldg., Battle Creek
Winslow, Sherwood B.....
1509 Security Nat. Bank Bldg., Battle Creek
Woodward, Douglas.....4515 Trumbull, Detroit
Worgess, D. R.....45 W. Territorial Rd., Battle Creek
Wu, Jack Foy.....S. W. Mich. T.B. San.,
1500 Blakslee, Kalamazoo
Yannitelli, S. A.....132 W. Hamilton Lane, Battle Creek
Zheutlin, Bertram.....50 Adams St., Battle Creek
Zindler, George A.....1206 Security Tower, Battle Creek

CASS COUNTY

Adams, Uriah M.....Marcellus
Clary, Rudolph I.....Dowagiac
Comstock, L. D.....216½ S. Front St., Dowagiac
Everett, Dan W.....Edwardsburg
Hickman, J. H.....212½ S. Front, Dowagiac
Loupee, George E.....Dowagiac
Loupee, S. L. (L).....Dowagiac
Pierce, Frank L. (L).....Dowagiac
Pierce, K. C.....140½ S. Front, Dowagiac
Rutz, L. M.....Marcellus
Zwergel, E. H.....Cassopolis

CHIPPEWA-MACKINAC COUNTIES

Allott, H. R.....300 Count St., Saulte Ste Marie
Bandy, Festus C. (R).....Franklin Manor, Sarasota, Fla.
Blair, Herbert M.....300 Court St., Sault Ste. Marie
Blue, J. J.....Cedarville
Clausen, C. H.....300 Court St., Sault Ste. Marie
Conrad, C. A. (E).....521 Ashmun, Sault Ste. Marie
Cowan, Donald W.....140 Spruce St., Sault Ste. Marie
Finlayson, D. D.....309 Ashmun, Sault Ste. Marie
Goddard, G. B.....Pickford
Goldberg, A. H.....301 Ashmun St., Sault Ste. Marie
Hagele, Marie A.....300 Court St., Sault Ste. Marie
Hamel, Herbert E.....St. Ignace
Harrington, H. M.....519 Ashmun, Sault Ste. Marie
Howe, Gertrude E.....300 Court St., Sault Ste. Marie
Howe, D. C., Jr.....300 Court St., Sault Ste. Marie
Mackie, T. B.....300 Court St., Sault Ste. Marie
McBryde, L. M.....Masonic Building, Sault Ste. Marie
Mertaugh, W. F.....Central Savings Bank Bldg.,
Sault Ste. Marie
Montgomery, B. T.....309 Ashmun, Sault Ste. Marie
Rhind, E. S.....300 Court St., Sault Ste. Marie
Scott, D. F.....300 Court St., Sault Ste. Marie
Solomon, Joseph H.....Mackinac Island
Trapasso, T. J.....300 Court St., Sault Ste. Marie
Venier, A. G.....519 Ashmun St., Sault Ste. Marie
Wallen, L. J.....409 Ashmun St., Sault Ste. Marie
Willison, Clayton (E).....Central Savings Bank Bldg.
Sault Ste. Marie
Yale, I. V. (L).....200 Ashmun St., Sault Ste. Marie

CLINTON COUNTY

Bennett, George W.....Elsie
Cook, Bruno C.....Westphalia
Elliott, Bruce R.....Ovid
Fillinger, Wells B.....Ovid
Foo, Charles T.....St. Johns
Grost, James M.....210 E. Walker St., St. Johns
Henthorn, A. C.....RFD #3, St. Johns
Kirker, J. G.....Fowler
Luton, F. E. (E).....St. Johns
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....St. Johns
Sheline, V. L.....Ashley
Slagh, Earl M.....Elsie
Smith, F. W.....St. Johns
Stephenson, W. F.....510 E. Walker St., St. Johns
Stoller, Paul F.....308 N. Mead St., St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, F. C.....First Nat. Bank Bldg., Escanaba
Benson, G. W.....Ludington St., Escanaba
Bernier, A. B.....547 Michigan Ave., Manistique
Boyce, D. H.....1007 Ludington, Escanaba
Brenner, Ervin J.....Corunna
Carlton, A. J. (L).....502 S. Seventh St., Escanaba
Defnet, Harry J.....121 S. Eleventh St., Escanaba
Dahlin, J. R.....1102 Wisconsin, Gladstone
Fyvie, James H.....202 S. Cedar, Manistique
Groos, H. Q.....1015 S. First, Escanaba
Groos, L. P.....1015 S. First, Escanaba
Harrison, William C.....403 S. Seventh, Escanaba
Hult, O. S.....1005 Delta Ave., Gladstone
Kee, C. E.....1102 Wisconsin, Gladstone
Lemire, D. F.....1104 S. First, Escanaba
Lemire, W. A.....1106 S. First, Escanaba
Lindquist, N. L.....205 S. 10th St., Escanaba
McInerney, T. A.....1221 Ludington, Escanaba
Miller, A. H.....901 Wisconsin, Gladstone
Olson, C. J.....621 Michigan Ave., Gladstone
Ryde, R. E.....Lake Shore Drive, Escanaba
Walch, J. J.....Lake Shore Dr., Escanaba
Wehner, M. E.....Manistique

DICKINSON-IRON COUNTIES

Addison, E. R.....412 Superior, Crystal Falls
Alexander, W. H.....Commercial Nat'l Bk., Iron Mountain
Anderson, Donald T.....408 Hamilton Ave., Kingsford
Boyce, G. H.....First National Bank Bldg., Iron Mountain
Browning, J. L.....212 East B St., Iron Mountain
Carlson, R. E.....Commercial Nat'l Bank, Iron Mountain
Cooper, C. A.....230 Washington Ave., Stambaugh
Hayes, Willard N.....716 Main St., Norway
Huron, W. H..... 107 E. "A" St., Iron Mountain
Irvine, L. E.....326 W. Genesee, Iron River
McEachran, Hugh D...401 E. "C" Street, Iron Mountain

Palm, E. T.....412 Superior St., Crystal Falls
Retallack, R. C.....326 W. Genesee, Iron River
Schmutzler, W. A.....373 Woodward, Iron Mountain
Schroeder, J. M.....1115 Stockbridge, Iron Mountain
Smith, Donald R.....105 E. A St., Iron Mountain
Steinke, C. G.....517 Stephenson, Iron Mountain

EATON COUNTY

Arner, Fred L.....231½ N. Main St., Bellevue
Brown, B. P.....116 Pearl St., Charlotte
Carothers, Daniel J.....315 S. Cochran St., Charlotte
Cook, J. Maxwell.....Eaton County Health Dept. 314 S. Cochran St., Charlotte
DeLand, C. L.....121 S. Main St., Olivet
Engle, P. H.....121 S. Main St., Olivet
Garlock, F. C.....Grand Ledge
Hannah, Harry W.....326 S. Cochran St., Charlotte
Harrod, Gordon R.....Grand Ledge
Hoffer, W. E.....115 S. Washington St., Charlotte
Imthun, E. F.....113 E. Jefferson, Grand Ledge
Johnson, Robert C. (M).....3700th Med. Gp. ATRC, Lakeland AFB, San Antonio, Texas
Meinke, A. H.....101 W. Plain St., Eaton Rapids
Meinke, Richard K. (M).....Eaton Rapids
Myers, Albert W.....Potterville
Sevener, Lester G.....236 S. Cochran St., Charlotte
Shockley, B. F.....111 S. Cochran St., Charlotte
Van Ark, Bert.....101 W. Plain, Eaton Rapids
Van Ark, H. F.....101 W. Plain St., Eaton Rapids
Whitlock, Stanley C.....Dimondale
Willits, C. O.....201 W. Seminary, Charlotte

GENESEE COUNTY

Adams, B. H.....2002 E. Court St., Flint
Adams, Chester H.....310 E. First St., Flint
Anderson, H. H.....11280 N. Saginaw, Mt. Morris
Anderson, J. L.....220 Genesee Bank Bldg., Flint
Andrews, Nelson A. C.....310 E. Main St., Flushing
Anthony, George E. R.....1015 Detroit St., Flint
Backus, Glenn R.....633 Mott Foundation Bldg., Flint
Baird, W. C.....504 National Bldg., Flint
Bald, Frederick W.....610 Mott Foundation Bldg., Flint
Barbour, Fleming A.....1439 Mott Foundation Bldg., Flint
Baske, Franklin W.....923 Maxine St., Flint
Bateman, L. G.....1928 Lewis, Flint
Benson, J. C., Sr. (L).....727 Clifford St., Flint
Benson, John C., Jr.....709 Genesee Bank Bldg., Flint
Berman, Harry.....3309 Fenton Rd., Flint 7
Bernstein, Eli N.....409 Kresge Bldg., Flint
Beyer, Damon P. (A).....3229 Lavra St., Jacksonville, Fla.
Beyer, George D.....145 Vienna St., Clio
Biggar, H. R. (L).....3109 S. Saginaw St., Flint
Bishop, D. L.....2226 Detroit St., Flint 5
Blakeley, A. C.....225 Covington, Detroit
Bogart, Leon M.....1008 Genesee Bank Bldg., Flint
Boles, William P.....714 Beach St., Flint
Bradley, Robert M.....420 Genesee Bank Bldg., Flint
Brain, R. Gordon.....509 First Nat. Bank Bldg., Flint
Branch, Hira E.....821 Mott Fd. Bldg., Flint
Brasie, Donald R.....907 Citizens Bank Bldg., Flint
Briggs, Guy D.....225 Genesee Bank Bldg., Flint
Bruce, William W.....5045 Morrish Road, Swartz Creek
Bryant, D. R.....621 Mott Foundation Bldg., Flint
Buchanan, W. F.....104 W. Caroline, Fenton
Burkett, L. V.....County Court House, Flint
Burnell, Max R.....3301 Westwood Parkway, Flint
Caster, E. Wilbur (L).....13312 Wales, Huntington Woods
Chambers, Myron S.....839 Mott Fd. Bldg., Flint
Charters, John H. (E).....Fenton
Clark, Clifford P. (R).....515 Villa Bella Ave., Coral Gables, Fla.
Clark, R. L.....1004 Genesee Bank Bldg., Flint
Collins, James I.....902 Stockdale, Flint
Colwell, C. W.....706 Citizens Bk. Bldg., Flint
Connell, John T.....305 Dryden Bldg., Flint
Conover, George V.....420 Genesee Bank Bldg., Flint
Conover, McClellan B.....312 Paterson Bldg., Flint
Conover, T. Sidney.....420 Genesee Bk. Bldg., Flint
Cook, Henry.....326 Genesee Bank Bldg., Flint
Covert, Floyd (L).....116 Lord St. Gaines
Craig, William G.....717 Mott Foundation Bldg., Flint
Credille, Barney A.....813 Genesee Bank Bldg., Flint
Curry, George J.....402 Genesee Bank Bldg., Flint
Curtin, John H.....A.C. Spark Plug Plant, Flint
Cutler, G. Campbell.....2415 Detroit St., Flint
Davis, R. C.....3029 Flushing Rd., Flint
Dawson, Ralph E.....1021 Mott Foundation Bldg., Flint
DelZingro, Nicholas.....Davison
Denholm, Nan H.....811 Mott Foundation Bldg., Flint
Dickstein, Bernard.....605 National Bldg., Flint
Dimond, Edwin G.....209 Genesee Bk. Bldg., Flint
Dodds, Frederick E.....1336 Lewis St., Flint
Dodds, Max.....608 First National Bldg., Flint
Dorsey, Philip W.....220 Genesee Bank Bldg., Flint
Drewyer, G. E.....907 Welch Blvd., Flint
Eichhorn, Ernest N.....1112 Mott Fd. Bldg., Flint
Eickhorst, Thomas N.....409 Dryden Bldg., Flint
Elliott, Hardie B.....1634 Mott Fdn. Bldg., Flint
Engelman, R. M. (M).....3710 Sherwood Drive, Flint
Ettinger, Ralph D.....111 S. Walnut St., Fenton
Farah, Ben S.....5001 N. Saginaw, Flint
Farhat, Maynard M.....620½ W. Court St., Flint
Fee, Manson G.....311 Kresge Bldg., Flint
Finkelstein, Theodore.....1415 Broadway, Flint
Flynn, Southard T.....1121 Mott Fdt. Bldg., Flint
Foley, Sydney I.....2217 Mason St., Flint
Fuller, Harvey T.....Mt. Morris
Gelenger, S. M.....County TB San., 702 Ballenger Hwy., Flint
Gleason, N. A.....1310 Mott Fdt. Bldg., Flint
Goering, George R. (L).....519 Dryden Bldg., Flint
Golden, H. Maxwell.....218 E. Court St., Flint
Goodfellow, B. T. (L).....506 Page St., Flint
Gorne, Saul S.....400 Sill Bldg., Flint 3
Grady, Donald R.....5001 N. Saginaw St., Flint
Griffin, Ernest P., Jr.....621 Mott Fdt. Bldg., Flint
Grover, H. F.....310 Dryden Bldg., Flint
Guile, Gurdon S.....1621 Dupont St., Flint
Gundry, G. L.....11736 Saginaw, Grand Blanc
Gutov, Isadore H.....607 Citizens Bank Bldg., Flint
Gutov, J. J.....607 Citizens Bk. Bldg., Flint
Guyon, Mary Ann.....302 W. Pierson Road, Flint
Guyon, J. L.....302 W. Pierson Rd., Flint
Hackley, Richard D.....4120 Western Road, Flint
Hague, Robert F.....210 E. Court St., Flint 3
Halligan, Raymond S. (L).....405 E. First St., Flint
Hamady, Ruth B.....228 Welch Blvd., Flint
Hamilton, A. J.....Fisher Body Co. #2, 3100 Van Syke Road, Flint
Harper, Homer.....Buick Motor Co., Flint
Harrison, Leo D. (R).....1132 Woodside Drive, Flint
Hauser, Frederick V.....1012 Mott Foundation Bldg., Flint
Hawkins, James E.....1226 Leith St., Flint
Hing, William.....326 Stockdale St., Flint
Hiscock, Harold H.....1315 Mott Fdt. Bldg., Flint
Hooper, Kendall.....714 Beach St., Flint
Hubbard, Wm. B.....302 Patterson Bldg., Flint
Hufton, W. L.....721 W. Sixth Ave., Flint
Hurd, Clayton E.....300 Roberts St., Fenton
Johnson, Arthur H.....3219 North St., Flint
Johnson, Frank D.....312 Patterson Bldg., Flint
Johnson, Raymond E.....907 Welch Blvd., Flint 4

Jones, Lafon.....1004 Genesee Bank Bldg., Flint
Jordan, P. H.....302 W. Second Ave., Flint
Judd, A. E.....2315 Davison Road, Flint
Kaufman, L. D.....4002 N. Saginaw, Flint
Kimbrough, C. B.....1402 S. Saginaw St., Flint
Knapp, William D.....1621 Mott Fdn. Bldg., Flint
Koop, Chester S.....2503 Detroit St., Flint
Kretchmar, Arthur H.....608 First National Bldg., Flint
Kurtz, John J.....421 Dryden Bldg., Flint
Laird, James I.....10114 Main St., Goodrich
Leach, J. Leonidas.....3007 Industrial Ave., Flint
Lewis, T. E.....4047 Mitchell Dr., Flint
Limbach, David R.....
Hurley Hospital, X-Ray Department, Flint
Livesay, Jackson E.....621 Mott Fdtn. Bldg., Flint
Logan, George W. (L).....Flushing
Lukens, T. John.....1103 Mott Fdt. Bldg., Flint
Lyttle, Sydney N.....615 Mott Foundation Bldg., Flint
MacGregor, Delbert M.....701 W. Dayton, Flint
Macksood, Joseph A.....2501 N. Saginaw St., Flint
Manwaring, John T.....1002 Citizens Bank Bldg., Flint
McArthur, Arthur.....1539 Mott Foundation Bldg., Flint
McCabe, Margaret M.....420 Genesee Bk. Bldg., Flint
McClellan, Junius W.....
Chevrolet Flint Assembly Div., Van Slyke at Atherton Rd., Flint 3
McGarry, Burton G. (L)....202 E. Caroline St., Fenton
McGarry, Roy A.....418 Dryden Bldg., Flint
McKenna, Oscar W. (E).....325 Stevens St., Flint
McLeod, K. W. A.....2801 N. Saginaw, Flint 5
McTaggart, David.....1604 Mott Foundation Bldg., Flint
Michael, S. R.....907 Welch Blvd., Flint
Michels, Robert M.....409 N. Saginaw St., Flushing
Miller, E. E.....2902 Detroit St., Flint
Miller, Loren Eugene.....2645 Corunna Road, Flint 3
Miltich, Anthony J.....415 Dryden Bldg., Flint
Moore, Kenneth B.....1613 Mott Fdtn. Bldg., Flint
Moore, Wesley P.....3101½ Industrial Ave., Flint
Morrish, Ray S.....1715 Crescent Drive, Flint
Morrison, William H.....205 Perry Road. Grand Blanc
Morrissey, V. H.....101 Stockdale St., Flint
Mosier, Edward C.....115 Luke St., Otisville
Murphy, E. Grant.....7316 Calkins Road, Flint
Neiswander, Paul L.....
Fisher Body Truck Plant, Grand Blanc
Odle, Ira D.....201 Welch Blvd., Flint
Orr, J. Walter (L)....Orrs Point, Lake Fenton, Fenton
Osher, Seymour L.....218 E. Court St., Flint
Pfeifer, Archibald C...11610 N. Saginaw St., Mt. Morris
Phillips, Robert L.....706 Citizens Bank Bldg. Flint
Pickering, W. H.....1602 Ballenger Hwy., Flint
Pratz, Oliver C.....1303 Detroit St., Flint
Preston, Otto J.....300 N. Chevrolet Ave., Flint
Purcell, F. L.....Goodrich Hospital, Goodrich
Ragan, Russell M.....3602 Beecher, Flint 3
Rapport, Richard L.....715 Mott Foundation Bldg., Flint
Rawlings, J. Mott.....1601 Neome Dr., Flint
Reichard, Orill (L).....1507 Detroit St., Flint
Reid, Wells C.....Goodrich Gen'l Hosp., Goodrich
Reynolds, Arthur J. (L).....910 E. Kearsley St., Flint
Richardson, Josephine W.....2610 Davison Rd., Flint
Rieth, George F.....1402 Davison Road, Flint
Roberts, Floyd A. (L).....428 Thompson St., Flint
Rowe, John B.....202 Paterson Bldg., Flint
Rulney, Max.....1128½ Chevrolet Ave., Flint
Rundles, Walter Z.....304 First Natl. Bldg., Flint
Rundles, Walter Z., Jr.....304 First Nat'l Bldg., Flint
Sandberg, Russell G...1315 Mott Foundation Bldg., Flint
Sandy, Kenneth R.....2701 Detroit St., Flint
Scavarda, Charles J.....304 First Nat. Bldg., Flint
Schiff, B. A.....200 Sill Bldg., Flint
Schreiber, E. Oskar.....421 Kresge Bldg., Flint
Schultz, J. Stanley.....3327 Fleming Road, Flint
Schwartz, J. M.....
4300 S. Saginaw St., Fisher Body Plant #1, Flint
Scott, Robert D.....1215 Detroit St., Flint
Searles, Karl F.....2932 Corunna Rd., Flint
Shantz, Leighton O.....1239 Mott Fd. Bldg., Flint
Sheeran, Daniel H.....809 Genesee Bank Bldg., Flint
Shipman, Charles W.....325 E. First St., Flint
Simoni, Lewis E.....3210 S. Dort Hwy., Flint
Sirna, Anthony R.....
Chevrolet Motor Co., 300 N. Chevrolet Ave., Flint
Sleeman, B. R.....129 E. Broad St., Linden
Smith, Eugene C.....814 Mott Fdtn. Bldg., Flint
Smith, Maurice J.....2801 N. Saginaw, Flint
Sniderman, Benjamin F.....727 Beach St., Flint
Snyder, Charles E.....8042 Miller Rd., Swartz Creek
Sorkin, Morris L.....718 Beach St., Flint
Sorkin, Samuel S.....718 Beach St., Flint
Sparks, Harvey V.....603 First Natl. Bldg., Flint
Steffe, Ralph S.....610 Mott Fdtn. Bldg., Flint
Steinman, Floyd H.....734 Mott Fdtn. Bldg., Flint
Stevens, P. K.....201 Michigan Theatre Bldg., Flint
Stevenson, William W.....416 Kresge Bldg., Flint
Streat, Rudolph W.....218 E. 8th St., Flint
Strong, K. H. (M)....90 Bryant Ave., White Plains, N. Y.
Stroup, Clayton K.....2002 E. Court St., Flint
Sutherland, James K.....402 E. Third St., Flint
Sutton, G. R.....303 W. Court St., Flint
Swartzendruber, Fred J.....2540 Lamothe, Detroit
Thompson, Jack W. (M)..USN Hosp., Jacksonville, Fla.
Thorburn, Grant.....702 Ballenger Hwy., Flint
Tofteland, Elmer H.....302 W. Third Ave., Flint
Tower, Rita B.....
Genesee County San., Ballenger Hwy., Flint
Treat, David L. (L).....1110 S. Drive, Flint
Trumble, George W. (L).....2500 S. Saginaw, Flint
Turner, Merald G.....316 Dryden Bldg., Flint
Tuuri, Arthur L.....Mott Clinic, Hurley Hospital, Flint
Van Harn, R. S.....811 Mott Fdn. Bldg., Flint
Vaughan, Edgar J.....Linden
Varney, Howard L. (M).....1415 Broadway, Flint
Vary, Edwin P.....608 First Natl. Bldg., Flint
Walcott, Carver G.....201 E. Caroline, Fenton
Ward, Nellie M.....1139 Mott Fdtn. Bldg., Flint
Ware, Frank A.....514 Genesee Bank Bldg., Flint
Wark, David R.....1315 Detroit, Flint
Wentworth, John E.....1651 Chevrolet Ave., Flint
Werness, Inga W.....304 First Nat. Bank Bldg., Flint
White, C. H.....106 River St., Fenton
White, Herbert T. (L).....1620 Mason St., Flint
Williams, W. S.....G-3398 S. Saginaw St., Flint
Willoughby, Gordon L.....5009 N. Saginaw St., Flint
Willoughby, Leslie L. (L).....1402 Davison Rd., Flint
Wills, Thomas N.....706 W. Court St., Flint
Winchester, Walter H (L).....
515 Genesee Bank Bldg., Flint
Woughter, Harold W.....1312 Mott Fdtn. Bldg., Flint
Wright, Donald R.....403 W. Court St., Flint
Zeis, M. G. (M).....718 Beach Street, Flint

GOGEBIC COUNTY

Albert, Samuel G.....119 Suffolk St., Ironwood
Anderson, Charles E.....Anvil Location, Bessemer
Davidson, Donald L.....200 S. Sophie St., Bessemer
Eisele, D. C.....2nd Fl., 109 E. Aurora St., Ironwood
Franck, John R., Jr.....401 Sunday Lake, Wakefield
Gertz, M. A.....109 E. Aurora St., Ironwood
Gingrich, W. A.....2nd Fl., 109 E. Aurora St., Ironwood
Gorilla, A. C.....2nd Fl., 210 S. Suffolk St., Ironwood
Harrington, R. R., 103 S. Suffolk St., 2nd Floor Ironwood
Lieberthal, M. J.....104 S. Suffolk, Ironwood
Lieberthal, Paul R.....104 S. Suffolk, Ironwood
Maccani, Wm. L.....Ironwood
O'Brien, A. J. (L).....216 E. Aurora, Ironwood
Pinkerton, H. A.....Newport Hospital, Ironwood

Santini, F. J.....2nd Fl., 109 E. Aurora St., Ironwood
Stevens, Charles S.....
Gogebic Clinic, 216 E. Aurora St., Ironwood
Tashiro, Kiyo.....Grand View Hospital, Ironwood
Tressel, Henry A.....Wakefield
Wacek, W. H.....Grand View Hospital, Ironwood

GRAND TRAVERSE COUNTY

Beall, J. G.....118½ E. Front, Traverse City
Bolan, E. J.....Suttons Bay
Brownson, K. N.....116 Cass, Traverse City
Brunk, C. F.....Rt. No. 1, Traverse City
Bushong, B. B.....116 Cass, Traverse City
Christie, J. W.....Northport
Duiker, Henry.....Box C, Traverse City
Dunn, C. W.....State Hospital, Traverse City
Ellis, Claude I.....Suttons Bay
Godfroy, B. M. (M).....400 Second ASU USAH
Camp Chaffee, Ark.
Goodrich, Dwight (R)..601 W. Front St., Traverse City
Haberlein, Charles R.....438 W. Front St., Traverse City
Hall, J. W.....212½ E. Front, Traverse City
Hamilton, E. E.....530 S. Union St., Traverse City
Herkner, Mildred L.....123½ E. Front St., Traverse City
Huene, Nevin.....112 E. Front, Traverse City
Huston, Russell R.....Elk Rapids
Jerome, J. T.....217 S. Madison, Traverse City
Lemen, C. E.....216½ E. Front, Traverse City
Lossman, Robert T.....Munson Hospital, Traverse City
Merritt, Harry E.....112½ E. Front St., Traverse City
Miller, Charles Scott.....State Hospital, Traverse City
Milliken, John G.....436½ W. Front, Traverse City
Nickels, M. M.....State Hospital, Traverse City
Osterhagen, H. F.....MR-11, Box 38, Traverse City
Osterlin, Mark F.....
Central Michigan Children's Clinic, Traverse City
Pike, D. G.....876 E. Front, Traverse City
Power, F. H.....116 Cass, Traverse City
Salon, Dayton D.....108½ E. Front St., Traverse City
Sheets, R. P.....Traverse City State Hosp., Traverse City
Sladek, E. F.....123 E. Front, Traverse City
Smith, Cody (M).....(no address)
Stone, Fordyce H.....Beulah
Swartz, F. G.....301 State Bank Bldg., Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L. (L).....116 Cass, Traverse City
Thirlby, Richard L.....711 Second St., Traverse City
Trautman, Frederick B.....Frankfort
Van Leuven, B. H. (R).....Empire
Way, L. R. (R).....436 E. State, Traverse City
Weitz, H. L.....529 Monroe, Traverse City
Wieh, J. E.....118½ E. Front, Traverse City
Wilcox, P. H.....526 W. 10th St., Traverse City
Wiley, P. K.....Elk Rapids
Zielke, I. H.....212 E. Front, Traverse City
Zimmerman, J. G.....306 State Bank Bldg., Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....215 W. Saginaw St., St. Louis
Barstow, W. E. (L).....215 W. Saginaw St., St. Louis
Becker, M. G.....Edmore
Bedo, A. V.....906 S. Franklin, Mt. Pleasant
Bergin, Joseph H.....1437 Michigan, Alma
Budge, M. J.....1035 Jefferson, Ithaca
Burch, L. J. (E).....314 E. Broadway, Mt. Pleasant
Burt, C. E.....110 S. Pine River, Ithaca
Burt, Loren G. (M).....Alma
Chamberlain, R. W.....608 E. Chippewa, Mt. Pleasant
Clinkston, Phillip.....518 S. Washington St., Mt. Pleasant
Davis, L. L.....314 S. Brown St., Mt. Pleasant
Drake, Wilkie M. (E).....Breckenridge
DuBois, C. F.....706 State St., Alma
Eldridge, J. H. (M).....6351st USAF Dispensary,
APO 235 c/o PM San Francisco, Calif.
Graham, B. J.....226 N. State St., Alma
Hall, R. F.....805 Douglas St., Mt. Pleasant
Hammerberg, Kuno.....622 McEwan, Clare
Harrigan, W. L.....408 E. Broadway, Mt. Pleasant
Hersee, W. E.....306 S. College, Mt. Pleasant
Hobbs, A. D.....120 W. Center St., St. Louis
Hoogerland, C. L.....236 N. State St., Alma
Hyslop, L. F.....612 S. Kinney St., Mt. Pleasant
Johnson, P. R.....206 S. College Ave., Mt. Pleasant
Juhnke, L. W.....1050 E. Maple St., Mt. Pleasant
Kilborn, H. F.....Ithaca
McArthur, Stewart C.....Clare Hosp. & Clinic, Clare
Oldham, E. S.....Breckenridge
Palmer, F. W.....P.O. Box 32, Mt. Pleasant
Putzig, L. W.....Blanchard
Ringer, P. H.....314 S. Brown St., Mt. Pleasant
Rottschafer, J. L.....715 Center St., Alma
Silvert, Pasche P.....Vestaburg
Strange, R. H.....630 S. College, Mt. Pleasant
Waggoner, R. L.....120 W. Center St., St. Louis
Wallman, C. H.....901 State St., Alma
Wickert, L. R. (M).....
USN Ordnance Plant, Indianapolis, Ind.
Wilcox, R. A.....203 W. End St., Alma
Wilson, Earl C.....Harrison
Wolfe, K. P.....427 W. Superior, Alma
Wood, C. B.....R.F.D. No. 2, Mt. Pleasant
Wood, J. M.....815 E. Maple, Mt. Pleasant

HILLSDALE COUNTY

Bates, M. P.....108 S. Manning, Hillsdale
Davis, L. A.....Camden
Day, Luther W.....112 E. Chicago St., Jonesville
Hanke, George R. (L).....R.F.D., Osseo
Hodge, C. L.....Reading
Hughes, Henry F. (L).....Hillsdale
Kline, Fred.....Litchfield
MacNeal, John A.....76 Manning St., Hillsdale
Martindale, E. A. (L).....Hillsdale
Mattson, H. F.....32 S. Broad St., Hillsdale
McFarland, O. G. (L).....North Adams
Michel, William O.....39 North St., Hillsdale
Miller, Harry C. (L).....
4760 Panorama Dr., San Diego 3, Calif.
Peterson, C. A. (M).....
1516 Pershing, San Francisco, Calif.
Sawyer, W. W.....61 N. Howell St., Hillsdale
Stein, Arthur J.....144 Budlong St. Hillsdale
Strom, Arthur G.....32 S. Broad St., Hillsdale
Trapp, Donald G.....32 S. Broad St., Hillsdale
Wiggins, Ira W.....230 E. Chicago St., Jonesville

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, A. B.....503 Sheldon Ave., Houghton
Aldrich, L. C.....1609 E. Houghton Ave., Houghton
Bourland, P. D. (L).....134½ Calumet Ave., Calumet
Bounland, P. E. M.....Army Chemical Center, Maryland
Brewington, G. F. (E).....
134½ Walnut Ave., Las Vegas, Nevada
Burke, J. J.....10 Duncan Ave., Hubbell
Gregg, W. T. S. (E).....
Gerry's Landing, Cambridge 38, Mass.
Hillmer, Raymond E.....1 Algomah, Painesdale
Hosking, F. S.....328 Florida St., Laurium
Janis, Anton J.....East Hancock, Hancock
King, Sidney.....St. Joseph's Hospital, Hancock
King, William T. (E).....Ahmeek
Kirton, Job R. W. (E).....106 Sixth St., Calumet
Kolb, F. E.....128 Calumet, Calumet
LaBine, Alfred.....1019 College Ave., Houghton
Larson, Forrest W.....1400 E. Houghton, Houghton
Lepisto, V. E.....414 Hecla St., Laurium
Levin, Simon (E).....1209 College Ave., Houghton
Lund, C. A. E.....1205 Calumet St., Lake Linden
Murphy, P. J.....130 Calumet, Calumet
Potter, E. C.....Baraga County Hospital, L'Anse
Repola, Kenneth L.....338 Iroquois St., Laurium
Roberts, Melvin D. (L).....404 Hancock, Hancock
Roche, Andrew M.....240 Pewabic St., Laurium
Sloan, P. S.....214 Clark St., Houghton
Smith, Charles R.....E. White St., Hancock
Stern, I. D.....220 Hubbell, Houghton
Stroube, J. A.....Baraga County Memorial Hosp., L'Anse
Wickliffe, J. T. P.....1167 Calumet Ave., Calumet
Winkler, Henry J.....L'Anse

HURON COUNTY

Bash, T. L.....Kinde
Dixon, Ralph C.....Pigeon
Gettel, Roy R.....Bad Axe
Herrington, Charles I.....Bad Axe
Herrington, Willet J.....Bad Axe
Monroe, Duncan J. (L).....Elkton
Oakes, C. W.....Harbor Beach
Ritsema, John.....Sebewaing
Scheurer, Clare A.....Pigeon
Sorensen, M. G.....15828 Mansfield, Detroit
Steinhardt, Edward E.....Elkton
Strempek, W. F.....209 W. St. Clair, Romeo
Thompson, J. E.....Caseville
Turner, Phillip R.....Harbor Beach
Wible, Charles F.....Sebewaing

INGHAM COUNTY

Alexander, Reuben G.....301 Seymour, Lansing
Altland, J. K.....Michigan Dept. of Health, Lansing
Andros, G. J.....420 W. Ottawa, Lansing
Asselin, David C.....503 Amer. State Bank Bldg., Lansing
Badgley, W. O.....624 N. Capitol Ave., Lansing
Baker, Arthur G.....Michigan Dept. of Health, Lansing
Bates, R. C.....1820 E. Michigan, Lansing
Bauer, Theodore I.....808 Olds Tower, Lansing
Behen, William C.....535 S. Capitol, Lansing
Bellinger, E. G. (L).....114 W. Lenawee, Lansing
Berens, B. M.....110 N. Rosemary, Lansing
Bevez, Frank L.....930 N. Washington Ave., Lansing
Black, Charles E.....529 W. Grand River, Williamston
Black, Gertrude C. K.....529 W. Grand River Ave., Williamston
Bowersox, R. J.....108 Division, East Lansing
Bradford, C. W.....419 S. Walnut, Lansing
Breakey, Robert S.....1211 Bank of Lansing Bldg., Lansing
Brown, Fred W., Jr.....536 Tussing Bldg., Lansing
Brubaker, Earl W.....1406 Bank of Lansing Bldg., Lansing
Brucker, Karl B.....610 S. Walnut St., Lansing
Burhans, J. B.....Oldsmobile Div. GMC, Lansing
Burhans, R. A.....808 Olds Tower, Lansing 8
Cairns, D. A.....136 W. Ash St., Mason
Calomeni, Anthony D.....309 Seymour, Lansing
Carr, Earl I.....300 W. Ottawa, Lansing
Chaskes, Marion Iddings G.....226 S. Capitol Ave., Lansing
Cheney, William D.....Dept. of Radiology, Sparrow Hosp., Lansing
Christian, L. G.....103 E. St. Joseph, Lansing
Clark, W. E.....136 W. Ash St., Mason
Clinton, George R.....136 W. Ash St., Mason
Combs, R. G.....300 W. Ottawa, Lansing
Comstock, H. C.....1031 E. Michigan, Lansing
Cook, R. J.....105 S. Jenison Ave., Lansing
Cope, H. E.....Michigan Dept. of Health, Lansing
Cordes, J. F.....512 Olds Tower Bldg., Lansing
Corneliuson, Goldie B.....Mich. Dept. of Health, Lansing
Cowan, J. A.....825 Touraine, East Lansing
Crandall, Clarence.....1964 S. Cedar St., Holt
Cummings, G. D.....Mich. Dept. of Health, Lansing
Darling, L. H.....115 W. Hillsdale, Lansing
Dart, Dorothy.....300 W. Ottawa St., Lansing
Dawe, C. D.....521 N. Capitol, Lansing
Dean, Carleton.....252 Hollister Bldg., Lansing
De Kleine, William.....301 Seymour St., Lansing
DeVries, C. L. F.....320 Townsend, Lansing
Dexter, Mary J.....129 E. Maple, Mason
Doyle, C. P. (E).....1408 Bank of Lansing Bldg., Lansing
Drolett, Donald J.....609 N. Washington Ave., Lansing
Drolett, Fred J.....900 Prudden Bldg., Lansing
Drolett, Lawrence A.....903 Prudden Bldg., Lansing
Dunn, F. M.....301 Seymour, Lansing
Ellis, Bertha (R).....Box 2327 Hollywood, Florida
Ellis, C. W. (L).....Box 2327 Hollywood, Florida
Feeney, Kenneth J.....1908 Olds Tower, Lansing 8
Feurig, J. S.....MSC Health Center, East Lansing
Finch, Russell L.....420 S. Walnut St., Lansing
Folkers, Leonard M.....234 Michigan Ave., East Lansing
Fortino, S. P.....203 Bauch Bldg., Lansing
Fosget, Wilbur W.....303 Bauch Bldg., Lansing
Foust, Earl H. (L).....P.O. Box 422, Eustis, Florida
French, Horace L.....301 Seymour, Lansing
Fryer, Douglas H.....207 City Hall Bldg., Lansing
Gardner, Carl A.....616 Wildwood, East Lansing
Gardner, C. B.....320 Townsend St., Lansing
Garlinghouse, A. John (M).....801 Wisconsin, Lansing
Goldner, Roy E.....1318½ S. Washington, Lansing
Harris, Herbert W.....609 N. Washington, Lansing
Harrison, W. H.....834 W. St. Joseph, Lansing
Harrold, J. F.....326 W. Ionia St., Lansing 15
Hart, L. C.....119 W. Lenawee, Lansing
Hayes, R. E.....1101½ S. Washington Ave., Lansing
Hayford, William D.....609 N. Washington Ave., Lansing
Heald, Gordon H.....1107 Bank of Lansing Bldg., Lansing
Heckert, Frank B.....1105 Bank of Lansing, Lansing
Heckert, J. K.....1105 Bank of Lansing Bldg., Lansing
Heerdt, Mark E.....Grand River & Grandview, Okemos
Henderson, N. D.....220 W. Madison, Lansing
Henry, L. L.....326 Townsend, Lansing
Henry, R. A.....142 W. Grand River, Williamston
Hermes, E. J.....310 Townsend St., Lansing
Heustis, Albert E.....Michigan Dept. of Health, DeWitt Rd., Lansing
Himmelberger, R. J.....320 Townsend, Lansing

Hockman, T. A. (M)..907 Blaine Drive, Alexandria, Va.
Hogg, Raymond.....Holt, Michigan
Holland, Charles F.....624 N. Capitol Ave., Lansing
Holt, S. H.....Michigan Dept. of Health, Lansing
Huggett, Clare C.....126 W. Grand River, Lansing
Hunt, O. R.....215 N. Walnut, Lansing
Hurth, M. S.....1717 Jerome St., Lansing
Isbister, J. L. (M).....
Michigan Dept. of Health, DeWitt Rd., Lansing
Jacob, S. Sprigg.....201 Ann St., East Lansing
Johnson, D. B.....320 Townsend St., Lansing
Johnson, Henry T., Jr. (M).....
c/o Infirmary, U.S.N. Ord. Sta., Inyokern, China Lake, Calif.
Johnson, Kenneth H.....1116 Olds Tower, Lansing
Johnston, Daniel W. (M).....(No address)
Jones, Francis, Jr.....716 Olds Tower Bldg., Lansing
June, R. C.....Michigan Dept. of Health, Lansing
Kahn, David....401 American State Bank Bldg., Lansing
Kalmbach, R. E.....301 Seymour St., Lansing
Keim, C. D.....502 Bauch Bldg., Lansing
Kent, A. Edith Hall.....311 S. Pine, Lansing
Kent, Herbert K.....311 S. Pine, Lansing
Kenyon, Fanny H.....Michigan Dept. of Health, Lansing
Klunzinger, Willard R.....326 W. Ionia St., Lansing
Kraft, L. C.....209 S. Main, Leslie
Landy, G. R.....226 S. Walnut, Lansing
Lange, Philip F.....1923 S. Cedar St., Lansing
Lanting, Helen E.....611 Ardson, East Lansing
Laughead, Charles A.....108 E. St. Joseph, Lansing
Lauzun, Virginia .....309 W. Main, Lansing
LeDuc, Don M.....310 Townsend St., Lansing
Leeder, Fred S.....Mich. Dept. of Health, Lansing
LeVett, Harry L.....117½ W. Shiawassee, Lansing
Lewis, Clayton, Jr.....326 Townsend, Lansing
Loree, Maurice C.....120 W. Hillsdale, Lansing
Lucas, T. A.....426 W. Ottawa, Lansing
Ludlum, L. C.....1126 W. Saginaw St., Lansing
Marriner, E. F.....4341 W. Delhi Rd., Holt
Martin, W. O.....4765 Nakoma, Okemos
Marzolf, M. F.....420 W. Ottawa St., Lansing
McConnell, E. G. (R).....212 Leslie St., Lansing
McCorvie, C. Ray.....129 E. Grand River, East Lansing
McCoy, Earl M. (R).....Grand Ledge
McElmurry, Leland R.....209 N. Walnut, Lansing
McGillicuddy, Oliver B.....1816 Olds Tower, Lansing
McGillicuddy, R. J.....300 W. Ottawa, Lansing
McIntyre, J. E.....600 S. Grand Ave., Lansing
McNamara, B. E.....326 Townsend, Lansing
Meade, Robert J.....1023-25 E. Michigan Ave., Lansing
Meade, William H.....1023 E. Michigan, Lansing
Melick, R. C.....326 W. Ionia, Lansing
Menzies, Clifford G.....MSC Hospital, East Lansing
Mercer, W. E.....304 Evergreen, East Lansing
Meyer, Hugh R. (R).....2117 Teel Ave., Lansing
Molina, Elba.....1512 E. Michigan, Lansing
Monfort, Robert N.....Health Center, MSC, East Lansing
Morris, M. K.....1023 E. Michigan Ave., Lansing
Morrow, R. J.....409 W. Ottawa, Lansing
Neering, James C.....
X-Ray Dept., St. Lawrence Hosp., Lansing
Ochsner, P. J.....310 McPherson St., Lansing
Paine, W. G.....108 E. St. Joseph St., Lansing
Parker, Earl E.....207 E. Bellevue, Leslie
Philips, David P.....715 W. Washtenaw, Lansing
Pinkham, R. A.....535 N. Capitol, Lansing
Place, Edwin H.....Oldsmobile Division, G.M.C., Lansing
Plesscher, W. H...119 E. Grand River Ave., East Lansing
Pomeroy, Richard W.....609 N. Washington, Lansing
Ponton, Joseph C.....117 E. Oak, Mason
Poppen, C. J.....1057 Roxburgh Rd., East Lansing
Prall, H. J.....505 Bauch Bldg., Lansing
Randall, O. M.....802 Am. State Bank Bldg., Lansing
Rector, F. L. (R).....823 Cast St., Evanston, Ill.
Reynolds, E. E.....12 Freeman, Ardmore, Okla.
Richards, F. D.....DeWitt
Richardson, M. L.....Sparrow Hospital, Lansing
Robson, Edmund J.....215 N. Walnut, Lansing
Rozan, J. S.....511 Bk of Lansing Bldg., Lansing
Ruhmkorff, R. H.....
Mich. State College Health Center, East Lansing
Russell, C. V.....Route 1, Northport
Rutledge, S. H.....110 W. Hillsdale, Lansing
Sander, J. F.....Cherry Hill Farm, Okemos
Scheidt, R. R.....126 W. Grand River Ave., Lansing
Schoff, Charles A.....129 E. Grand River, Williamston
Schultz, A. E.....119 E. Grand River Ave., East Lansing
Seger, F. L. (L).....
1035 Cherry St., N.E., St. Petersburg, Fla.
Shapiro, Hyman D.....125 W. Saginaw, Lansing
Sharp, Mahlon S.....606 W. Shiawassee St., Lansing
Shaw, Milton.....320 Townsend, Lansing
Sherman, G. A.....112 W. Hillsdale, Lansing
Sichler, Harper G.....301 Seymour, Lansing
Silverman, Irving E.....1009 E. Michigan Ave., Lansing
Sleight, Justin L.....117½ W. Shiawassee, Lansing
Smith, Anthony V.....116 W. Sycamore St., Mason
Snyder, LeMoyne.....
705 American State Bank Bldg., Lansing
Snyder, Ruth C. E.....234 W. Michigan, East Lansing
Spagnuolo, A. J.....1418 S. Logan St., Lansing
Spencer, Perry C.....320 Townsend, Lansing
Stanka, A. G.....Alexander Bldg., Grand Ledge
Stanley, Arthur L.....401 W. Greenlawn, Lansing
Steiner, A. A. (A).....Rt. 3, Grand Ledge
Steiner, S. D.....
Oldsmobile Division, General Motors Corp., Lansing
Stiles, Frank.....2012 Olds Tower, Lansing
Stilwell, George D.....420 W. Ottawa St., Lansing
Stimson, Paul R.....517 S. Grand, Lansing
Stone, B. J.....1031 E. Michigan, Lansing
Stow, Robert M.....512 Olds Tower Bldg., Lansing
Strauss, P. C.....408 Am. State Bank Bldg., Lansing
Stringer, C. J.....401 W. Greenlawn, Lansing
Summers, John E.....1401 Bemis, S.E., Grand Rapids
Sundell, Edwin C.....112 W. Hillsdale St., Lansing
Swartz, F. C.....215 N. Walnut St., Lansing
Tamblyn, F. W.....335 Seymour, Lansing
Toothaker, K. W.....930 N. Washington Ave., Lansing
Tooze, F. M.....215 N. Walnut, Lansing
Trescott, Robert F.....716 Olds Tower, Lansing
Trimby, Robert H.....122 W. Hillsdale, Lansing
Troost, F. L.....4341 W. Delhi Rd., Holt
Vander Slice, E. R.....20 Terrace Walk, Berkeley, Calif.
VanderZalm, T. P.....1452 Cambridge Rd., Lansing
Venier, Joseph.....812 Sparrow Ave., Lansing
Von Lackum, Leroy....1116 Mich. Nat'l Tower, Lansing
Wadley, Ralph.....335 Seymour, Lansing
Walker, Leo W.....
Dept. of Pathology, St. Lawrence Hospital, Lansing
Webb, Roy O.....2176 Hamilton Rd., Box 3, Okemos
Wellman, John M.....301 Seymour Ave., Lansing
Wilensky, Thomas.....301 Seymour, Lansing
Wiley, Harold W.....Michigan Dept. of Health, Lansing
Willson, Howard S.....704 Olds Tower, Lansing
Wilson, Harry A.....703 S. Capitol, Lansing
Wolcott, Lester E.....Grand River & Grandview, Okemos
Woodruff, R. C.....335 Seymour, Lansing
Worthington, Ralph.....532 Tussing Bldg., Lansing

IONIA-MONTCALM COUNTIES

Anderson, Donald H.....Portland
Bird, W. L.....Greenville
Bracey, L. E. (L).....Sheridan
Buck, Jack.....Ionia
Bunce, E. P.....Trufant
Bunce, Leo W.....Trufant
Campbell, R. E.....106 N. Depot St., Ionia
Cook, G. H.....Ionia State Hospital, Ionia
Dunkin, Lloyd S.....Greenville
Fleming, J. W. C.....Pewamo
Foust, Joseph C.....Ionia
Fox, Harold M.....Portland
Geib, O. P.....Carson City
Glerum, John B.....Greenville
Haarer, John G.....State Hospital, Ionia
Halick, John.....Greenville
Hansen, Carl M.....Stanton
Hansen, M. M.....Greenville
Haskell, R. H.....Wayne Co. Trg. School, Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
House, Glenn W.....602 W. Orange, Greenville
Kazmers, Nikolas.....Lakeview
Kelsey, L. E.....Lakeview
Kopchick, Joseph.....Muir
Lilly, Isaac S.....Stanton
Lincoln, Norman.....Lake Odessa
Marston, L. L.....Lakeview
Messenger, A. L.....Portland
Minick, William G.....Belding
Olsen, Bruce.....Greenville
Pates, Donald C.....Belding
Peabody, C. H. (L).....582 Tod Lane, Youngstown, Ohio
Reid, Harold E.....Stanton
Rice, Robert E. (M).....Greenville
Robertson, P. C.....Ionia State Hospital, Ionia
Seidel, Karl E. (A).....
801 Livingston N.E., Grand Rapids
Slagh, Milton E.....Saranac
Smith, R. O.....724 Roselawn, Ionia
Socha, Edmund S.....Ionia
Stevens, C. E.....Stanton
Swift, E. R. (L).....Lakeview
Tannheimer, J. F.....Ionia
Trinca, Peter J. (A).....Butterworth Hosp., Grand Rapids
Tromp, J. L.....Lake Odessa
Van Loo, J. A.....422 S. Pleasant, Belding

JACKSON COUNTY

Abraham, A. O.....Hudson
Adams, Ellis W.....517 Wildwood, Jackson
Ahronheim, J. H.....1410 Greenwood, Jackson
Anderson, W. B.....404 Carter Bldg., Jackson
Appel, Saul.....510 Dwight Bldg., Jackson
Baker, George M.....Parma
Bartholic, Frank W.....Homer
Beckwith, Sidney A.....Stockbridge
Bentley, J. P.....404 McNeal St., Jackson
Bentley, Mary N.....404 McNeal St., Jackson
Brashares, Z. A.....Brooklyn
Bullen, G. Rex.....418 Third, Jackson
Clarke, Corwin S.....605 Dwight Bldg., Jackson
Cochrane, Wayne A. (L).....409 McBride St., Jackson
Cooley, Charles W.....Mercy Hospital, Jackson
Cooley, Randall M.....141 East Robinson, Jackson
Corley, Cecil.....204 Homecrest Rd., Jackson
Corley, Ennis H.....1211 W. Franklin St., Jackson
Corley, Robert.....204 Homecrest Rd., Jackson
Cox, Ferdinand (L).....434 Wildwood Ave., Jackson
Culver, Guy D. L.....Stockbridge
DeMay, Cuthbert E.....403 E. Michigan, Jackson
DeMay, John D.....403 E. Michigan, Jackson
Deming, Richard C.....517 Wildwood, Jackson
Dengler, Charles R.....504 Third St., Jackson
Dickman, Harry M.....120 N. Michigan, Hudson
Douglas, E. W.....4000 Cooper St., Jackson
Enders, W. H. (L).....1102 Natl. Bank Bldg., Jackson
Filip, H. K., Jr.....755 W. Michigan Ave., Jackson
Finton, Robert E.....1204 Natl. Bank Bldg., Jackson
Finton, Walter L.....290 W. Michigan Ave., Jackson
Foust, W. L.....3 N. 20th St., Lafayette, Ind.
Gibson, F. J. (L).....2717 S. Sixth St., St. Petersburg, Fla.
Greenbaum, Harry.....1203 Greenwood, Jackson
Growt, Bowers H.....Addison
Habenicht, Hilda A.....910 Reynolds Bldg., Jackson
Hackett, Thomas E.....519 N. East Ave., Jackson
Hackett, Thomas L.....519 N. East Ave., Jackson
Hanft, Cyril F.....Springport
Hardie, George C.....290 W. Michigan, Jackson
Harris, Lester J. (E).....607 W. Washington Ave., Jackson
Hicks, Glenn C. (L).....615 Dwight Bldg., Jackson
Holst, John B.....1023 Francis St., Jackson
Holstein, Arthur P.....214 Ann Arbor St., Manchester
Hunt, Maurice E.....2534 Francis St., Jackson
Huntley, W. B.....P.O. Box 188, Hudson
Joerin, W. A.....612 First St., Jackson
Karr, Jean P.....1502 Reynolds Bldg., Jackson
Keefer, A. H.....Concord
Kempton, George B.....1115 Greenwood Ave., Jackson
Kline, S. L.....3525 Jefferson Rd., Clark Lake
Kudner, D. F.....435 Wildwood, Jackson
Lake, Edward C.....612 First St., Jackson
Landron, Daniel.....Michigan Center
Lenz, Charles R. Jr.....405 First St., Jackson
Leonard, Clyde A. (L).....
1401 Jackson City Bank Bldg., Jackson
Lewis, E. F.....1112 Carlton Blvd., Jackson
Linden, V. E.....605 Dwight Bldg., Jackson
Ludwick, J. E.....237 W. Washington, Jackson
Ludwick, J. P. (M).....
c/o Div. Surgeon's Office, Hq. 40th Inf. Div., APO No. 6, c/o P.M., San Francisco, Calif.
McGarvey, William E.....802 City Bank Bldg., Jackson
McLaughlin, J. M.....710 S. Brown St., Jackson
McLaughlin, M. J.....502 W. Michigan, Jackson
McLauthlin, Herbert B.....439 Wildwood Ave., Jackson
Meads, Jason B.....1406 City Bank Bldg., Jackson
Medlar, Robert E.....505 Dwight Bldg., Jackson
Morelli, Lorenzo.....290 W. Michigan Ave., Jackson
Munro, Colin D. (E).....740 W. Michigan Ave., Jackson
Munro, J. E. (L).....144 W. Pearl St., Jackson
Munro, Nathan D.....740 W. Michigan Ave., Jackson
Murphy, Bernard M.....1010 E. Michigan Ave., Jackson
Newton, Ray E.....910 Reynolds Bldg., Jackson
Oleksy, Stanley P.....744 W. Michigan Ave., Jackson
O'Meara, James J. (R).....1126 Burr, Jackson
Otis, Grant L.....525 Wildwood Ave., Jackson
Payne, Andrew K.....Foote Hospital, Jackson
Phillips, George H.....TB Sanatorium, Jackson
Porter, Horace W.....505 Wildwood Ave., Jackson
Pray, Frank F.....310 Steward Ave., Jackson
Pray, G. R. (E).....404 S. Jackson, Jackson
Rice, J. W.....603 Jackson City Bank Bldg., Jackson
Ries, Richard G.....612 First St., Jackson
Riley, Philip A.....500 S. Jackson St., Jackson
Sargent, Leland E.....114 N. Thompson St., Jackson
Sautter, W. A.....Horton
Scott, John A., Jr.....432 W. Michigan Ave., Jackson
Shaeffer, Arthur M.....401 Reynolds Bldg., Jackson
Shaeffer, L. Dale.....1502 Reynolds Bldg., Jackson
Sher, David B.....4000 Cooper St., Jackson
Sill, Henry W.....290 W. Michigan, Jackson
Sirhal, Alfred M.....Brooklyn

Smith, Dean W.....500 W. Michigan, Jackson
Southwick, W. A. (A).....362 E. Main St., Springport
Stewart, L. L. (E).....308 Edgewood, Jackson
Stewart, L. L. Jr.....901 Reynolds Bldg., Jackson
Stolberg, Carl A.....517 Wildwood Ave., Jackson
Stone, Ethon L.....143 N. Jackson, Jackson
Sugar, Samuel.....509 Reynolds Bldg., Jackson
Tate, Cecil E.....1315 Francis St., Jackson
Taylor, Ross V.....517 Wildwood, Jackson
Thalner, L. F.....609 W. Michigan Ave., Jackson
Thayer, E. A.....1104 Natl. Bank Bldg., Jackson
Thompson, Tom B.....424 W. Michigan, Jackson
Torwick, E. T.....501 Dwight Bldg., Jackson
Townsend, J. W.....108 Hague, Vandercook Lake
Van Gasse, J. J.....City Offices, Jackson
Van Schoick, Frank.....419 W. High St., Jackson
Van Schoick, John D.....Hanover
Van Wagnen, F. I.....434 Wildwood Ave., Jackson
Vivirski, Edward E.....603 S. Elm St., Jackson
Wallace, Warren S.....706 London St., Brunswick, Ga.
Weddon, Edward R.....Stockbridge
Wholihan, John W.....102 Lydia St., Jackson
Wickham, Woodward A.....420 W. Michigan, Jackson
Wilson, Norman D. (L).....1107 Reynolds Bldg., Jackson
Winter, G. E. (E).....1102 First St., Jackson

KALAMAZOO COUNTY

Aach, Hugo A.....136 E. Michigan Ave., Kalamazoo
Alexander, C. A.....118 W. North, Kalamazoo
Andrews, Sherman E.....224 E. Cedar St., Kalamazoo
Appel, B. A.....310 Bronson Medical Center, Kalamazoo
Appel, W. P.....310 Bronson Medical Center, Kalamazoo
Armstrong, Robert J.....605 Hanselman Bldg., Kalamazoo
Banner, Lawrence R.....507 Burdick St., Kalamazoo
Barak, Herbert G.....224 McNair Bldg., Kalamazoo
Barnabee, James W.....503 S. Burdick, Kalamazoo
Barrows, Winona M.....
S.W. Michigan TB San., 1500 Blakslee St., Kalamazoo
Barry, M. Leroy.....Plainwell Sanitarium, Plainwell
Benjamin, Margaret F.....2217 Parchmount, Kalamazoo
Bennett, Keith F.....252 E. Lovell, Kalamazoo
Betz, E. G.....216 Bronson Medical Center, Kalamazoo
Birch, W. G.....212 Bronson Medical Center, Kalamazoo
Bodmer, Harvey C.....403 W. Kalamazoo St., Kalamazoo
Borgman, Wallace.....723 W. South St., Kalamazoo
Breneman, James C.....25 Pearl St., Galesburg
Brown, Irmel W.....
306 Kalamazoo Natl. Bank Bldg., Kalamazoo
Brue, Peter P.....1009 Cambridge Dr., Kalamazoo
Burbidge, Earl L.....
Upjohn Co., 301 Henrietta St., Kalamazoo
Burrell, R. B.....136 E. Michigan Ave., Kalamazoo
Callander, C. G.....1224 Hillcrest, Kalamazoo
Chapman, Paul B.....Vicksburg
Chrest, Clarence P.....458 W. South St., Kalamazoo
Cobb, Horace R. (R).....305 Pythian Bldg., Kalamazoo
Conrad, Maynaid M.....252 E. Lovell St., Kalamazoo
Cook, R. G.....222 McNair Bldg., Kalamazoo
Cooper, Paul F.....252 E. Lovell St., Kalamazoo
Crane, Warren B.....420 S. Rose St., Kalamazoo
Crawford, Kenneth L.....612 Douglas Ave., Kalamazoo
Creager, Ray O.....909 Wheaton, Kalamazoo
Cretsinger, Francis C.....224 E. Cedar St., Kalamazoo
Currier, R. K.....6646 Portage St., Kalamazoo
Dahlstrom, Doris E.....723 S. Westnedge Ave., Kalamazoo
Dana, Robert L.....228 W. Cedar St., Kalamazoo
DeGroat, Albert F.....401 Fairfax St., Kalamazoo
Delbert, Stewart G.....530 W. Lovell St., Kalamazoo
DeLong, Robert E.....Borgess Hospital, Kalamazoo
DePree, H. E.....216 Bronson Medical Center, Kalamazoo
Dew, Robert R.....252 E. Lovell, Kalamazoo
DeWitt, Norman L.....803 Hanselman Bldg., Kalamazoo
Dick, Leo A.....611 Howard St., Kalamazoo
Doezema, E. R. (M).....
316 Bronson Medical Center, Kalamazoo
Dowd, B. J.....420 John St., Kalamazoo
Doyle, Frederick M.....611 Howard St., Kalamazoo
Estill, Don V.....414 W. Patterson St., Kalamazoo
Fast, R. B.....136 E. Michigan Ave., Kalamazoo
Fath, August F.....136 E. Michigan Ave., Kalamazoo
Finton, Max A.....252 E. Lovell, Kalamazoo
Fopeano, John V.....136 E. Michigan Ave., Kalamazoo
French, Merle R.....1128 Miles Ave., Kalamazoo
Fulkerson, C. B. (L).....
402 Kalamazoo Natl. Bank Bldg., Kalamazoo
Fuller, Paul M.....419 S. Burdick St., Kalamazoo
Gerstner, Louis W.....420 John St., Kalamazoo
Goodhue, Lolita G.....2503 W. Main St., Kalamazoo
Grant, Frederick E. (E).....214 Douglas Ave., Kalamazoo
Green, William L.....136 E. Michigan Ave., Kalamazoo
Grekin, R. H.....1310 Am. Nat'l Bank Bldg., Kalamazoo
Haddock, D. A., Jr.....6646 Portage Ave., Kalamazoo
Hammer, J. M.....100 Maple St., Parchment
Hanson, C. M.....217 Bronson Medical Bldg., Kalamazoo
Harrelson, William D...136 E. Michigan Ave., Kalamazoo
Hayner, Russell A.....1043 E. Cork St. Kalamazoo
Heersma, H. S.....252 E. Lovell, Kalamazoo
Heinle, Robert.....The Upjohn Co., Kalamazoo
Herbert, Walter N.....422 John St., Kalamazoo
Hersey, E. Freeman.....316 Henrietta St., Kalamazoo
Hersey, Margaret S.....4407 Bronson Blvd., Kalamazoo
Hildreth, R. C.....458 W. South St., Kalamazoo
Hodgman, Albert B.....612 Douglas Ave., Kalamazoo
Hoebeke, W. G.....
212 Bronson Medical Center, Kalamazoo
Holder, C. O.....Kalamazoo State Hospital, Kalamazoo
Howard, R. G.....Borgess Hospital, Suite 583, Kalamazoo
Howard, Willard H.....1602 Gull Rd., Kalamazoo
Hubbell, R. J.....252 E. Lovell St., Kalamazoo
Huyser, William C.....427 S. Burdick St., Kalamazoo
Irwin, William D.....805 Hanselman Bldg., Kalamazoo
Jackson, H. C.....252 E. Lovell St., Rm. 220, Kalamazoo
Jennings, R. M.....
Box A, Kalamazoo State Hosp., Kalamazoo
Jennings, Wesley O.....420 John St., Kalamazoo
Kavanaugh, William R.....612 Douglas Ave., Kalamazoo
Kilgore, Robert N.....252 E. Lovell St., Kalamazoo
Klerk, William J.....224 E. Cedar St., Kalamazoo
Koestner, Paul A.....1303 Portage, Kalamazoo
Lavender, Howard C.....605 Norton Dr., Kalamazoo
Lawrence, J. O.....301 Henrietta St., Kalamazoo
Light, Richard U.....828 W. South St., Kalamazoo
Light, S. Rudolph.....136 E. Michigan Ave., Kalamazoo
Littig, John D.....1708 Embury Rd., Kalamazoo
Locklin, W. Kaye.....136 E. Michigan Ave., Kalamazoo
Loynd, J. W.....136 E. Michigan Ave., Kalamazoo
MacDonald, Marshall A.....
319 Bronson Medical Center, Kalamazoo
MacGregor, J. R.....100 Maple St., Parchment
Machin, Harold A.....420 John St., Kalamazoo
Malone, James G.....420 John St., Kalamazoo
Margolis, F. J. (M).....2901 S. Westnedge, Kalamazoo
Marshall, Don.....252 E. Lovell St., Kalamazoo
Marshall, William P.....160 Edgemoor Ave., Kalamazoo
Martens, Irvin J.....252 E. Lovell St., Kalamazoo
May, Donald G.....420 John St., Kalamazoo
McCarthy, Joseph S.....1005 Oakland Drive, Kalamazoo
McManus, J. M.....2901 S. Westnedge, Kalamazoo
Moe, Carl R.....1324 S. Park St., Kalamazoo
Morter, Roy A.....
Kalamazoo State Hospital, Box A, Kalamazoo
Nell, Edward R.....
Sta. Inf. USMC AS Cherry Point, N. C.
Overbey, Charles B.....State Hospital, Kalamazoo
Patmos, Martin.....
306 Bronson Medical Center, Kalamazoo
Pearson, Edwin O.....458 W. South St., Kalamazoo

Peelen, J. William.....1324 S. Park St., Kalamazoo
Peelen, Matthew.....
320 Bronson Medical Center, Kalamazoo
Perry, Clifton W.....136 E. Michigan Ave., Kalamazoo
Pingham, R. A. (A).....2436 University, Kalmazoo
Prentice, Hazel R.....458 W. South St., Kalamazoo
Pullon, Alton E.....422 John St., Kalamazoo
Rasmussen, Leo B.....152 N. Main, Vicksburg
Reames, Harold R.....The Upjohn Company, Kalamazoo
Rigterink, Gerald H.....136 E. Michigan Ave., Kalamazoo
Roberts, Millard S.....136 E. Michigan Ave., Kalamazoo
Rockwell, Donald C.....136 E. Michigan Ave., Kalamazoo
Rogers, R. J.....126 N. Kalamazoo, Vicksburg
Ryan, Frederic C.....507 S. Burdick, Kalamazoo
Sage, Edward D. (E).....127 S. Burdick, Kalamazoo
Scherer, Flora....Kalamazoo State Hospital, Kalamazoo
Scholten, D. J.....522 S. Burdick, Kalamazoo
Scholten, Roger A.....252 E. Lovell St., Kalamazoo
Scholten, William (R).....
Kalamazoo State Hospital, Kalamazoo
Schrier, C. M.....Kalamazoo State Hospital, Kalamazoo
Schrier, Paul G.....
317 Bronson Medical Center, Kalamazoo
Schrier, Thomas.....1008 Dwillard Drive, Kalamazoo
Scott, William A.....
208 Bronson Medical Center, Kalamazoo
Shackleton, William E. (R)..420 S. Rose St., Kalamazoo
Shook, Ralph W.....136 E. Michigan Ave., Kalamazoo
Siemsen, W. J.....
316 Bronson Medical Center, Kalamazoo
Simpson, Bernard W.....610 S. Burdick St., Kalamazoo
Sisk, Wilfred N.....
Upjohn Company, 301 Henrietta St., Kalamazoo
Slatmyer, Karel R.....605 Hanselman Bldg., Kalamazoo
Smith, T. C.....Kalamazoo State Hospital, Kalamazoo
Sofen, Morris B.....
603 Kalamazoo Nat. Bank Bldg., Kalamazoo
Southworth, Maynard N.....Box 36, Schoolcraft
Stewart, William C. Jr.....224 E. Cedar St., Kalamazoo
Stiller, A. E...S.W. Michigan TB San., 1500 Blakeslee St., Kalamazoo
Stryker, Homer H.....Borgess Hospital, Kalamazoo
Upjohn, E. G.....
Upjohn Co., 301 Henrietta St., Kalamazoo
VanderVelde, Kenneth M.....
320 Bronson Medical Center, Kalamazoo
Verhage, Martin D.....228 W. Cedar, Kalamazoo
Volderauer, John C.....458 W. South St., Kalamazoo
Warnke, Robert D.....136 E. Michigan Ave., Kalamazoo
Weadon, Preston S.....252 E. Lovell St., Kalamazoo
Wilbur, E. P. (E).....1730 Cambridge, Kalamazoo
Williamson Edwin M.....
315 Bronson Medical Center, Kalamazoo
Youngs, A. S. (E).....416 S. Burdick, Kalamazoo
Youngs, Cyril A.....416 S. Burdick, Kalamazoo
Zolen, Margaret H.....628 S. Park, Kalamazoo

KENT COUNTY

Adams, Frank A.....526 Leonard St. N.W., Grand Rapids
Aitken, George T.....12-18 Monroe N.E. Grand Rapids
Albers, G. Donald....203 Paris Ave. S.E., Grand Rapids
Aldridge, C. W., Jr.....
1516 Wealthy St. S.E., Grand Rapids
Alfenito, Felix S.....26 Sheldon Ave. S.E., Grand Rapids
Allen, R. V.....1669 Plainfield N.E., Grand Rapids
Anderson, Karl A.....
Michigan Veterans Facility, 3000 Monroe N.E., Grand Rapids
Andre, Harvey M.....26 Sheldon S.E., Grand Rapids
Avery, Noyes L.....833 Lake Drive S.E., Grand Rapids
Baert, George H. (E).....
218 Kendall Bldg., Grand Rapids
Baker, Abel J. (L).....Ashton Bldg., Grand Rapids
Ballard, Milner S.....1516 McKay Tower, Grand Rapids
Balyeat, Gordon W.....
1810 Wealthy St. S.E., Grand Rapids
Barofsky, G. F.....808 Alger St. S.E., Grand Rapids
Beaton, James H.....
1516 Wealthy St. S.E., Grand Rapids
Beeman, Carl B.....833 Lake Drive S.E., Grand Rapids
Beets, W. Clarence.....124 E. Fulton St., Grand Rapids
Bell, Charles M.....
12-18 Monroe Ave. N.E., Grand Rapids
Benjamin, H. G.....72 Sheldon Ave. S.E., Grand Rapids
Benner, W. H.....250 Cherry St. S.E., Grand Rapids
Benson, Roland R.....250 Cherry St. S.E., Grand Rapids
Bergsma, Stuart....1942 Sherman St. S.E., Grand Rapids
Bettison, Wm. L.....124 E. Fulton St., Grand Rapids
Beukema, Marenus J.....6850 S. Division, Grand Rapids
Bignall, C. R. (M).....2637 Belfast S.E., Grand Rapids
Blackburn, Henry M.....110 E. Fulton St., Grand Rapids
Blocksma, Ralph.....125 Fountain N.E., Grand Rapids
Boelkins, Richard C...125 Fountain N.E., Grand Rapids
Boersma, Donald.....26 Sheldon S.E., Grand Rapids
Boet, Frank A. (L)....849 Scribner N.W., Grand Rapids
Boet, John T...2339 Wyoming Ave. S.W., Grand Rapids
Bolt, R. J. (A).....Univ. Hosp., Ann Arbor
Bond, George L. (L).....Rapid City
Bonzelaar, Marvin..26 Sheldon Ave. S.E., Grand Rapids
Booher, Craig E.....1810 Wealthy St. S.E., Grand Rapids
Bosch, Leon C.....26 Sheldon Ave. S.E., Grand Rapids
Botting, A. J.....2554 Sherwood S.W., Grand Rapids
Boyce, D. C.....124 E. Fulton, Grand Rapids
Brace, F. C.....1498 Lake Drive S.E., Grand Rapids
Braunschneider, G. E.....
1632 W. Leonard St., Grand Rapids
Brayman, Charles W. (L).....Cedar Springs
Brink, J. Russell.....110-116 E. Fulton St., Grand Rapids
Brook, Jacob D. (L).....Grandville
Brotherhood, James S. (L).....
3239 Scenic Drive, Muskegon
Browning, E. S. (L).....
303 Keith Theatre Bldg., Grand Rapids
Buist, S. J.....55 Sheldon S.E., Grand Rapids
Bull, Frank L.....72 E. Division, Sparta
Burleson, John S.....531 Greenwood S.E., Grand Rapids
Burling, Wesley M.....
758 Michigan St. N.E., Grand Rapids
Burroughs, Frank M., Jr.....11 Wilson, Grandville
Butler, Wm. J.....26 Sheldon Ave. S.E., Grand Rapids
Byrd, Mary Lou.....
700 Kent Hills Dr. N.E., Grand Rapids
Carpenter, Luther C.....110 E. Fulton St., Grand Rapids
Caulkin, H. S. (M).....26 Sheldon S.E., Grand Rapids
Cayce, William..502 Medical Arts Bldg., Grand Rapids
Chamberlain, Louis H. (L).....
441 Crescent N.E., Grand Rapids
Chandler, Donald.....74-88 Ionia N.W., Grand Rapids
Chase, R. J.....833 Lake Drive S.E., Grand Rapids
Clahassey, E. C.....26 Sheldon S.E., Grand Rapids
Clawson, C. K.....445 Cherry St. S.E., Grand Rapids
Claytor, Robert W.....142 Michigan N.W., Grand Rapids
Clement, Duane M.....
72 Sheldon Ave. S.E., Grand Rapids
Corbus, Burton R. (L).....Metz Bldg., Grand Rapids
Crane, Harold D.....2454 Almont S.E., Grand Rapids
Currier, F. P.....26 Sheldon Ave. S.E., Grand Rapids
Dales, Ernest W.....1430 McKay Tower, Grand Rapids
Damstra, Harold J.....1553 Boston S.E., Grand Rapids
Davis, David B.....26 Sheldon Ave. S.E., Grand Rapids
Davis, R. A.....110-116 Fulton St. E., Grand Rapids
Dawson, W. Douglas.....
26 Sheldon Ave. S.E. Grand Rapids
Dean, Alfred.....Sagola
DeBoer, Clarence J.....11 S. Wilson St., Grandville
DeBoer, Guy W.....26 Sheldon Ave. S.E., Grand Rapids
DeMaagd, Gerald.....143 Courtland, Rockford
DeMol, Richard J.....1414 Eastern S.E., Grand Rapids

Denham, R. H.....110-116 E. Fulton St., Grand Rapids
DePree, Isla G.....12 Monroe N.E., Grand Rapids
DePree, Joe.....1810 Wealthy St. S.E., Grand Rapids
DeVel, Leon.....739 Plymouth S.E., Grand Rapids
DeVries, Daniel.....1414 Eastern S.E., Grand Rapids
DeWar, M.M.....609 Medical Arts Bldg., Grand Rapids
Dewey, Kent A.....26 Sheldon Ave. S.E., Grand Rapids
DeYoung, Thies.....35 E. Division, Sparta
Dick, Mark W.....1508 McKay Tower, Grand Rapids
Diskey, Donald G.....634 Bridge N.W., Grand Rapids
Dixon, W. L.....26 Sheldon Ave. S.E., Grand Rapids
Docter, Leubert.....25 Sheldon Ave. S.E., Grand Rapids
Doran, F. L.....110 E. Fulton St., Grand Rapids
Doyle, J. L.....2402 Eastern S.E., Grand Rapids
Dyer, David P.....62 Ransom N.E., Grand Rapids
Eaton, Robert M.....12 Burton S.E., Grand Rapids
Eggleston, H. R.....117 Page N.E., Grand Rapids
Ellis, M. E. (A).....2128 Hall St. S.E., Grand Rapids
Failing, John F.....110-116 E. Fulton St., Grand Rapids
Falbisaner, G. J.....
27th Engr. Combat Bn., Fort Campbell, Ky.
Farber, Charles E.....68 Ransom N.E., Grand Rapids
Faust, Lawrence W.....
26 Sheldon Ave. S.E., Grand Rapids
Fellows, Kenneth E.....
110-116 E. Fulton St., Grand Rapids
Ferguson, James A.....72 Sheldon S.E., Grand Rapids
Ferguson, Lynn A.....72 Sheldon S.E., Grand Rapids
Ferrand, Louis G.....3 N. Monroe, Rockford
Fitts, Ralph L.....110 E. Fulton St., Grand Rapids
Fitzgerald, Erwin.....68 Ransom N.E., Grand Rapids
Flintoff, W. M.....754 W. Fulton, Grand Rapids
Flynn, J. Donald.....26 Sheldon S.E., Grand Rapids
Fochtman, T. W.....72 E. Division, Sparta
Foshee, J. C.....124 E. Fulton St., Grand Rapids
Frantz, Charles H.....
1810 Wealthy St. S.E., Grand Rapids
Fuller, E. H., Jr.....515 Ashton Bldg., Grand Rapids
Fuller, W. J.....833 Lake Drive S.E., Grand Rapids
Gamm, Kenneth E.....
1516 Wealthy St. S.E., Grand Rapids
Gibbs, Floyd F.....4327 S. Division Ave., Grand Rapids
Gilbert, Ralph H.....110-116 E. Fulton St., Grand Rapids
Gillett, F. S.....68 Ransom N.E., Grand Rapids
Gorney, Mark (A)....2722 Hall St. S.E., Grand Rapids
Gosling, R. J. (M).....
10407 Inwood Ave., Silver Spring, Md.
Gouwens, W..E..3000 Monroe Ave. N.W., Grand Rapids
Grant, Lucile R.....1810 Wealthy St. S.E., Grand Rapids
Grass, Edward J.....833 Lake Drive S.E., Grand Rapids
Gray Fred B.....26 Sheldon Ave. S.E., Grand Rapids
Graybiel, George P.....Cherry Valley S.E., Caledonia
Griffith, Lucian S.....12 Monroe N.E., Grand Rapids
Grosenbaugh, C. H. (A).....
463 Crescent St. N.E., Grand Rapids
Gunn, J. A. (M).....809 Olson Place, El Paso, Texas
Gunning, R. E. L.....401 Cherry St. S.E., Grand Rapids
Haeck, William, Jr.....1414 Eastern S.E., Grand Rapids
Hagerman, D. B.....26 Sheldon Ave. S.E., Grand Rapids
Hamp, Arthur K.....833 Lake Drive S.E., Grand Rapids
Hayes, L. W., Sr.....Howard City
Hayes, L. W., Jr. (M)....USAF Hosp., Scott AFB, Ill.
Heaton, John R. (A).....
2102 Anderson Dr. S.E., Grand Rapids
Heetderks, Dewey R.....26 Sheldon S.E., Grand Rapids
Henry, James (E)....38 Monroe St. N.W., Grand Rapids
Herrick, Ruth.....26 Sheldon Ave. S.E., Grand Rapids
Hill, A. Morgan.....310 E. Fulton St., Grand Rapids
Hill, Thomas B.....103 W. Main St., Lowell
Hodgen, John T...1810 Wealthy St. S.E., Grand Rapids
Hoekstra, Andrew L.....
209 Medical Arts Bldg., Grand Rapids
Hoffs, Albertus J.....26 Sheldon Ave. S.E., Grand Rapids
Holcomb, J. Winslow.....
1315 McKay Tower, Grand Rapids
Holkeboer, Henry D.....
1925 Eastern Ave. S.E., Grand Rapids
Hollander, Stephen.....
1600 Grandville Ave. S.W., Grand Rapids
Hoogerhyde, Jack.....124 E. Fulton St., Grand Rapids
Horning, D. J. (A).....Univ. Hosp., Ann Arbor
Houghton, Richard C.....
525 Glenwood S.E., Grand Rapids
Hudson, H. C.....456 Cherry St. S.E., Grand Rapids
Hufford, A. R.....260 Jefferson S.E., Grand Rapids
Humphreys, James C.....
219 Medical Arts Bldg., Grand Rapids
Hunderman, Edward D.....
538 Eastern Ave. S.E., Grand Rapids
Hydrick, R. H.....445 Cherry St. S.E., Grand Rapids
Hyland, William A.....110 E. Fulton St., Grand Rapids
Ireland, H. D.....700 Fuller Ave. N.E., Grand Rapids
Jack, William W.....
1810 Wealthy St. S.E., Grand Rapids
Jameson, F. M.....833 Lake Drive S.E., Grand Rapids
Jaracz, Walter J.....634 Bridge St. N.W., Grand Rapids
Jaracz, W. J., Jr.....634 Bridge N.W., Grand Rapids
Jarvis, Charles, Jr...1520 Plainfield N.E., Grand Rapids
Jellema, John F.....2060 Voorheis N.W., Grand Rapids
Jensen, William B.....2825 Oakwood S.E., Grand Rapids
Johns, Donald C.....124 E. Fulton St., Grand Rapids
Johnston, William L.....110 E. Fulton St., Grand Rapids
Jones, H. E. (A).....1614 N. Connecticut, Royal Oak
Jones, Horace C.....1840 Wealthy St. S.E., Grand Rapids
Kelly, Edward F.....124 E. Fulton St., Grand Rapids
Kempter, Albert H.....1200 Lake Dr. S.E., Grand Rapids
Kendall, Eugene L. (L).....
360 Division St. S., Grand Rapids
Kessler, D. L.....1610 Robinson Rd. S.E., Grand Rapids
Kinkella, A. M. (A).....26 Sheldon S.E., Grand Rapids
Klaus, C. D.....1498 Lake Drive S.E., Grand Rapids
Kniskern, Paul W.....26 Sheldon S.E., Grand Rapids
Kooistra, Henry P...26 Sheldon Ave. S.E., Grand Rapids
Kreulen, Henry J.....
2452 Godwin Ave. S.E., Grand Rapids
Kriekard, P. J. (L).....
735 Leonard N.W., Grand Rapids
Kruse, William T., Jr.....312 E. Fulton, Grand Rapids
Laird, Robert G.....110 E. Fulton Ave., Grand Rapids
Lamberts, A. E.....68 Ransom Ave. N.E., Grand Rapids
Lanning, N. E.....1200 Madison St. S.E., Grand Rapids
Lees, I. B. (A).....931 Breton Rd. S.E., Grand Rapids
Lentini, Joseph R.....110 E. Fulton St., Grand Rapids
Lester, V. L.....Butterworth Hosp., Grand Rapids
Lewis, G. H.....3425 Division Ave. S., Grand Rapids
Lieffers, Harry.....26 Sheldon Ave. S.E., Grand Rapids
Lillie, W. I.....26 Sheldon Ave. S.E., Grand Rapids
List, Carl F.....833 Lake Drive S.E., Grand Rapids
Logie, James W.....833 Lake Drive S.E., Grand Rapids
MacDonnell, James A.....12 Monroe N.E., Grand Rapids
MacIntyre, D. S.....833 Lake Drive S.E., Grand Rapids
Marsh, John P.....74-88 Ionia N.W., Grand Rapids
Martin, A. M.....110 E. Fulton St., Grand Rapids
Martinus, Martin.....
525 Overbrook Lane S.E., Grand Rapids 7
Mattson, R. P.....110-116 E. Fulton St., Grand Rapids
Maynard, Mason S.....445 Cherry St. S.E., Grand Rapids
McCormick, John K.....
1371 Plainfield Ave. N.E., Grand Rapids
McDougal, Wm. J.....125 Fountain N.E., Grand Rapids
McDougall, Clarice L...310 E. Fulton St., Grand Rapids
McKay, O. I.....207 W. Main, Lowell
McKenna, Joseph L.....
26 Sheldon Ave. S.E., Grand Rapids
McKinlay, L. M.....124 E. Fulton St., Grand Rapids
Meade, R. H., Jr.....
1810 Wealthy St. S.E., Grand Rapids
Meeuwsen Bernard.....
26 Sheldon Ave. S.E., Grand Rapids
Mehney, Gayle H...26 Sheldon Ave. S.E., Grand Rapids
Miller, J. D.....110 E. Fulton St., Grand Rapids
Miller, John J.....1580 Water, Marne
Mitchell, W. B.....26 Sheldon Ave. S.E., Grand Rapids
Moen, Cornetta G.....53 Lafayette S.E., Grand Rapids

Moleski, Joseph V...26 Sheldon Ave., S.E. Grand Rapids
Moleski, Leo T.....26 Sheldon Ave. S.E., Grand Rapids
Moleski, S. L.....26 Sheldon Ave. S.E., Grand Rapids
Moll, Arthur M.....74-88 Ionia N.W., Grand Rapids
Montgomery, J. C. (M)....701 E. Francis, Corona, Calif.
Moore, Douglas P...110-116 E. Fulton St., Grand Rapids
Morey, Edward C. (L)..557 Fulton St. E., Grand Rapids
Morley, John D.....
City Hall Annex, 303 Ionia Ave. N.W., Grand Rapids
Mouw, Dirk R.....1854 Division S., Grand Rapids
Mulder, G. A.....68 Ransom N.E., Grand Rapids
Mulder, J. D.....6850 Division Ave. S., Grand Rapids
Nanzig, Reinard P.....1516 Wealthy S.E., Grand Rapids
Nickel, Kenneth C.....833 Lake Dr. S.E., Grand Rapids
Noordewier, Albert (L).....
1518 Grand Rapids Nat. Bank Bldg., Grand Rapids
Northouse, Peter B.....
26 Sheldon Ave. S.E., Grand Rapids
Notier, Victor A.....26 Sheldon Ave. S.E., Grand Rapids
Oates, S. M. (M).....110 E. Fulton, Grand Rapids
Oliver, Walter W.....26 Sheldon Ave. S.E., Grand Rapids
Overbeck, E. L. (M).....445 Cherry, S.E., Grand Rapids
Paalman, Russell J.....
26 Sheldon Ave. S.E., Grand Rapids
Patterson, W. P.....
1961-63 Division Ave. S., Grand Rapids
Payne, C. Allen....1840 Wealthy St. S.E., Grand Rapids
Payne, C. E. (A).....427 Trowbridge, Allegan
Pearson, Glenn A.....26 Sheldon Ave. S.E., Grand Rapids
Pedden, John R., Jr.....
445 Cherry St. S.E., Grand Rapids
Pilling, W. C.....833 Lake Drive, S.E., Grand Rapids
Plekker, J. D.....6850 Division S., Grand Rapids
Pool, John D.....445 Cherry St. S.E., Grand Rapids
Posthuma, A. E.....26 Sheldon Ave. S.E., Grand Rapids
Postma, E. Y.....68 Ransom N.E., Grand Rapids
Pott, A. L.....1011 E. Fulton, Grand Rapids
Prothro, W. B.....303 Ionia Ave. N. W., Grand Rapids
Ragsdale, L. V.....300 Bostwick N.E., Grand Rapids
Ralph, L. Paul....833 Lake Drive S.E., Grand Rapids
Rasmussen, R. A.....1810 Wealthy St. S.E., Grand Rapids
Reed, Torrance.....304 Ashton Bldg., Grand Rapids
Reus, William F.....24 Burton S.E. Grand Rapids
Riekse, J. M.....1916 Division S., Grand Rapids
Rigterink, John W. (E).....
1291 Cambridge Dr., Grand Rapids
Riley, G. L.....1419 Coit N.E., Grand Rapids
Ringenberg, J. C.....26 Sheldon Ave. S.E., Grand Rapids
Robb, Charles S.....445 Cherry St. S.E., Grand Rapids
Robbert, J. C. (M).....11 S. Wilson, Grandville
Roberts, Mortimer E. (E).....
625 Plymouth Road, Grand Rapids
Robinson, Harold C.....
26 Sheldon Ave. S.E., Grand Rapids
Rodgers, William L.....616 Bridge N.W., Grand Rapids
Rooks, W. H.....418 Leonard St. N.W., Grand Rapids
Roosenberg, Wm...3000 Monroe Ave, N.E., Grand Rapids
Rosenzweig, Leonard.....
833 Lake Drive S.E., Grand Rapids
Roth, Emil M.....124 E. Fulton St., Grand Rapids
Ryan, John A.....26 Sheldon Ave. S.E., Grand Rapids
Sanders, J. F.....26 Sheldon Ave. S.E., Grand Rapids
Schaubel, Howard J.....124 E. Fulton St., Grand Rapids
Schermerhorn, L. J...1508 McKay Tower, Grand Rapids
Schloss, G. T.....Tucson Medical Center, Tucson, Ariz.
Schneider, G. R.....1810 Wealthy St. S.E., Grand Rapids
Schnoor, E. W.....26 Sheldon Ave. S.E., Grand Rapids
Schnute, Louise F.....1508 McKay Tower, Grand Rapids
Schumacher, E. E.....833 Lake Drive S.E., Grand Rapids
Scott, William B.....114½ Michigan N.W., Grand Rapids
Sculley, Raymond E.....126 Burton S.E., Grand Rapids
Seime, Reuben I.....St. Mary's Hospital, Grand Rapids
Sevensma, Elisha S. (L).....
2114 Anderson Dr. S.E., Grand Rapids
Sevensma, Eugene S.....
1318 McKay Tower, Grand Rapids
Shellman, Millard W.....110 E. Fulton St., Grand Rapids
Sidell, Richard H.....312 E. Fulton, Grand Rapids
Siebers, Bernard H...26 Sheldon Ave. S.E., Grand Rapids
Sluyter, J. S.....1034 Franklin S.E., Grand Rapids
Smith, A. B.....110 E. Fulton St., Grand Rapids
Smith, Edwin M.....
12-18 Monroe Ave. N.E., Grand Rapids
Smith, Ferris.....1810 Wealthy St. S.E., Grand Rapids
Smith, R. Earle.....709 Ashton Bldg., Grand Rapids
Smith, Robert B.....125 Fountain N.E., Grand Rapids
Snider, J. D. (A)..2130 Godwin Ave. S.E., Grand Rapids
Snyder, Clarence H.....
26 Sheldon Ave. S.E., Grand Rapids
Southwick, C. H.....55 Sheldon S.E., Grand Rapids
Southwick, G. Howard.....
55 Sheldon Ave. S.E., Grand Rapids
Stankey, R. M. (M).....339 Alten, N.E., Grand Rapids
Steffensen, Wallace H.....
1810 Wealthy St. S.E., Grand Rapids
Stonehouse, G. G.....
26 Sheldon Ave. S.E., Grand Rapids
Stoneman, Fernley.....11 S. Wilson, Grandville
Stover, Virgil E.....1719 Madison S.E., Grand Rapids
Stuart, Gerhardus J. (L)....Metz Bldg., Grand Rapids
Sugg, Cullen E.....303 E. Fulton, Grand Rapids
Sugiyama, Tetsuo.....124 E. Fulton St., Grand Rapids
Swenson, H. C.....124 E. Fulton St., Grand Rapids
Ten Have, John.....806 Leonard N.W., Grand Rapids
Tesseine, Arthur J.....
242 Jefferson Ave. S.E., Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, A. B.....1810 Wealthy St. S.E., Grand Rapids
Thompson, Edward C.....
26 Sheldon Ave. S.E., Grand Rapids
Thompson, Frank D.....
1810 Wealthy St. S.E., Grand Rapids
Thomson, J. W.....833 Lake Drive, S.E., Grand Rapids
Tidey, Marcus B.....456 Cherry S.E., Grand Rapids
Tiffany, Joseph C.....110 E. Fulton St., Grand Rapids
Torgerson, Wm. R...833 Lake Drive S.E., Grand Rapids
Truog, C. P.....110 E. Fulton St., Grand Rapids
Usndek, H. E...Ft. Benning Army Hosp., Ft. Benning, Ga.
Uthoff, Carl W.....68 Ransom Ave. N.E., Grand Rapids
VanBree, R. S.....124 E. Fulton St., Grand Rapids
VandenBerg, Allison R.....
26 Sheldon Ave. S.E., Grand Rapids
VandenBerg, Henry J. (L).....
2933 Bonnell Rd., Grand Rapids
VandenBerg, W. O.....
USN Ord. Testing St., Inyokern, China Lake, Calif.
VandenKolk, K. J.....127 E. State St., Grandville
VanderMeer, Raymond.....
26 Sheldon Ave. S.E., Grand Rapids
VanderPloeg, William H.....
1209 Kalamazoo S.E., Grand Rapids
Vander Veer, C. G. (M).....
1511 Sylvan St. S.E., Grand Rapids
VanDuine, Henry J.....
26 Sheldon Ave. S.E., Grand Rapids
VanNoord, Gelmer A.....6850 Division S., Grand Rapids
Van't Hof, Albert.....110 E. Fulton St., Grand Rapids
Van Portfliet, Paul..26 Sheldon Ave. S.E., Grand Rapids
Van Solkema, Andrew A.....953 E. Fulton, Grand Rapids
Van Solkema, Arthur.....64 State W., Grandville
VanWoerkom, Daniel....750 W. Leonard, Grand Rapids
Van Zwalenburg, Benjamin R.....
833 Lake Drive S.E., Grand Rapids
Vecchio, T. J.....26 Sheldon Ave. S.E., Grand Rapids
Veldman, Harold E.....26 Sheldon S.E., Grand Rapids
Venema, Jay R.....26 Sheldon Ave. S.E., Grand Rapids
Ver Meulen, John....2400 Wyoming S.W., Grand Rapids
VanMeulen, Peter.....105 Baynton, N.E., Grand Rapids
Verwys, A. L. Hubert....815 Alger S.E., Grand Rapids
Vining, Keats K., Jr.....
833 Lake Drive S.E., Grand Rapids
Vis, William R.....26 Sheldon Ave. S.E., Grand Rapids
Voss, J. A.....2060 Alpine Ave., N.W., Grand Rapids
Vyn, Jay D.....74-88 Ionia N.W., Grand Rapids

Wahby, Elmer F.....300 Bostwick N.E., Grand Rapids
Waterman, Donald F.....68 Ransom N.E., Grand Rapids
Webb, C. F. (M)....26 Sheldon Ave. S.E., Grand Rapids
Webber, Jerome E.....310 E. Fulton St., Grand Rapids
Wellen, K. E.....1200 Lake Drive, S.E., Grand Rapids
Wells, S. M.....110 E. Fulton St., Grand Rapids
Wenger, Aaron V. (E).....
132 Grand Ave. N.E., Grand Rapids
Wenger, John N.....Coopersville
Whalen, J. M. (M).....
Dept of Pacific, 100 Harrison St., San Francisco, Calif.
Whinery, J. B. (E).....
1403 Green Cove Road, Winter Park, Fla.
Whinery, Joseph F.....16 Monroe Ave., Grand Rapids
Whittenberger, R. N.....
833 Lake Drive, S.E., Grand Rapids
Wiarda, Roy J.....1539 Plainfield N.E., Grand Rapids 5
Wiese, John L.....310 E. Fulton St., Grand Rapids
Wilkes, John B.....1810 Division S., Grand Rapids
Williams, John R.....
833 Lake Drive S.E., Grand Rapids
Willits, P. W. (R).....
Blodgett Medical Bldg., Grand Rapids
Wilson, William E. (R).....
37 Prospect Ave. N.E., Grand Rapids
Winfield, Emory D.....457 Burton S.E., Grand Rapids
Winter, Garrett E.....1967 Godfrey S.W., Grand Rapids
Wright, Thomas B.....1571 Wealthy S.E., Grand Rapids
Wurz, John F.....26 Sheldon S.E., Grand Rapids
Yared, Jerome A.....1974 S. Division, Grand Rapids
Yegge, J. P.....Kent City

LAPEER COUNTY

Bishop, G. Clare.....Almont
Boruch, Leon R.....Drawer "A," Lapeer
Buchanan, Thomas.....Imlay City
Burley, David H. (E).....Almont
Chapin, Clarence D.....Columbiaville
Conaway, Charles.....Lapeer
Dorland, Clarke.....Lincoln St., Lapeer
Doty, James R.....Clay St., Lapeer
Greaver, Cornell.....North Branch
Leith, Dorothy L.....Imlay City
McBride, John R.....915 Liberty St., Lapeer
Merz, Henry G. (E).....Lapeer
O'Brien, Daniel J.....Nepessing St., Lapeer
Rehn, Adolph T.....
Assistant Medical Supt., Lapeer State Home, Lapeer
Smith, E. B.....Lapeer State Home & Trg. School, Lapeer
Smith, Glen L.....131 E. Third St., Imlay City
Thomas, J. Orville (E).....North Branch
Zemmer, Harry B.....Clay St., Lapeer
Zolliker, C. R.....P.O. Drawer A, Lapeer

LENAWEE COUNTY

Benz, Carl A.....308 N. Broad St., Adrian
Blair, Thomas H.....Natl. Bank Bldg., Adrian
Blanchard, L. E.....301½ W. Main St., Hudson
Blanden, Merwin R.....Ford Bldg., Tecumseh
Claxton, W. T.....136 Chicago St., Britton
Cook, C. L.....Ford Bldg., Tecumseh
Dustin, Richard E.....103 E. Chicago St., Tecumseh
Eddy, H. R. C.....
Adrian Professional Bldg., Hill St., Adrian
Hamilton, J. D. (M)..104 "B" Bradshaw, El Paso, Texas
Hammel, Richard T.....401 E. Chicago St., Tecumseh
Harrison, Robert E.....418 W. Adrian St., Blissfield
Heffron, Charles.....231 N. Main, Adrian
Heffron, Howard H.....231 N. Main St., Adrian
Heffron, Harold.....231 N. Main St., Adrian
Helzerman, Ralph F.....112 S. Ottawa St., Tecumseh
Hewes, A. B. (L).....146 E. Maumee, Adrian
Hewes, William H.....146 E. Maumee St., Adrian
Hinshaw, Warren V.....139½ N. Main St., Adrian
Hornsby, W. B.....132 E. Chicago St., Clinton
Huebner, R. J.....421 Steer St., Addison
Hunter, T. B.....201 Natl. Bank Bldg., Adrian
Isley, Homer E.....115 W. Adrian St., Blissfield
Loveland, H. H. (E).....515 S. Second Ave., Escanaba
Marsh, R. G. B.....610 W. Logan St., Tecumseh
Mast, W. H. (R).....106 N. Democrat St., Tecumseh
Miller, Perry L.....310 E. Maumee, Adrian
O'Connor, A. R.....122 Locust St., Clinton
Parker, D. A.....454 S. Main St., Adrian
Pasternacki, A. S.....206 E. Front St., Adrian
Patmos, Bernard.....127½ E. Maumee, Adrian
Raabe, E. C.....124 North St., Morenci
Rogers, John D.....146 Toledo St., Adrian
Sayre, P. P.....121 N. Main, Onsted
Stark, Emily S.....155 E. Maumee St., Adrian
Thompson, J. R., Jr.....106 E. Chicago, Tecumseh
Tubbs, R. V.....120 E. Adrian St., Blissfield
Van Dusen, Chad A.....R.F.D. No. 2, Blissfield
Whitehouse, Keith.....118 W. Main St., Morenci
Wilson, George.....108 Jackson St., Clinton
Wynn, G. H.....310 N. Broad St., Adrian

LIVINGSTON COUNTY

Barton, T. A.....116 N. Michigan Ave., Howell
Clarke, Niles A.....723 Spencer Rd., Brighton
Duffy, Ray M.....250 E. Main, Pinckney
Fidler, W. F.....Mich. State San., Howell
Gentles, Ernest.....Howell
Glenn, Bernard H.....Fowlerville
Hauer, R. Fred.....Fowlerville
Hendren, J. J.....Fowlerville
Hill, H. C.....116 N. Michigan, Howell
Huntington, Harry G.....104 W. Grand River, Howell
May, Lewis E.....924 W. Grand River Ave., Howell
McGregor, A. J.....300 E. Grand River, Brighton
Nicholas, Mildred V.....Michigan Sanatorium, Howell
Perry, F. J. C.....17640 San Rosa, Rt. 3, Birmingham
Polack, R. T.....Michigan State San., Howell
Scheafer, Joseph C.....Michigan State Sanitorium, Howell
Schenden, A. J.....6335 W. M36, Pinckney
Sigler, Hollis L.....110 N. Michigan, Howell
Walker, Enos G.....4485 Cordley Lake Rd., Lakeland
Woodworth, E. S.....422 E. Lake St., Howell

LUCE COUNTY

Adams, D. C.....Newberry
Campbell, Earl H. (E).....Newberry
Gibson, Robert E. L.....Newberry
Hicks, R. P.....228 Newberry Ave., Newberry
Purmort, William R., Jr.....Newberry
Streitwieser, R. J.....Newberry State Hospital, Newberry
Surrell, Matthew A.....Newberry
Swanson, George F.....
VA Hospital, University & Woodland Av., Philadelphia 4, Penna.
Thompson, T. W.....Newberry State Hospital, Newberry

MACOMB COUNTY

Adler, Morton W.....19188 Appoline Ave., Detroit
Banting, O. F.....69089 Main St., Richmond
Barker, John G.....8050 Warren Blvd., Centerline
Bogucki, Chester.....6565 E. Eight Mile Rd., Detroit
Bower, A. B.....Armada
Brady, Milo J.....21509 Eleven Mile Rd., St. Clair Shores
Bryce, James W.....25020 Van Dyke, Centerline
Buckley, Daniel J.....160 S. Walnut, Mt. Clemens
Croman, Joseph M., Jr.....117 Cass Ave., Mt. Clemens
Curlett, James E. (L).....26765 Gratiot, Roseville
Deal, Harold R.....11584 Somerset, Detroit
Dudzinski, E. J.....51034 Washington St., New Baltimore
Ellias, Elmer P.....4330 Fullerton, Detroit 6
Engels, John A.....Richmond
Goldman, B. J.....406 Monitor Leader Bldg., Mt. Clemens
Hartmann, W. B.....1416 S. Gratiot, Mt. Clemens
Heine, Austin W.....99 S. Gratiot, Mt. Clemens
Isbey, Edward K.....25020 Van Dyke, Centerline
Ivkovich, Peter.....12501 East 23 Mile Rd., Utica
Jewell, James H.....18215 Utica Rd., Roseville
Juliar, J. F.....302 Monitor Leader Bldg., Mt. Clemens
Kane, W. J.....171 North Ave., Mt. Clemens
Lynch, Russell E.....25020 Van Dyke, Centerline
Maguire, A. J.....4875 Van Dyke Ave., Utica
Mattes, Max W.....18600 Griggs, Detroit
Moore, G. F.....410 Monitor Leader Bldg., Mt. Clemens
Mulligan, Philip T.....91 Cass St., Mt. Clemens
Niekamp, H. H.....45157 Van Dyke, Utica
Parker, B. Morgan (R).....Utica
Reichman, J. J...312 Monitor Leader Bldg., Mt. Clemens
Reitzel, Rufus H.....199 S. Gratiot, Mt. Clemens
Reizen, Maurice S.....10564 Ludlow, Huntington Woods
Revere, J. O.....192 S. Gratiot, Mt. Clemens
Rickman, L. D.....10 Howard St., Mt. Clemens
Rivard, Charles L...20825 Mack Ave., Grosse Pte. Woods
Rivkin, Joseph.....44 S. Gratiot Ave., Mt. Clemens
Roth, George E.....19136 Mendota Ave., Detroit
Rothman, Arthur M.....22552 Gratiot, East Detroit
Rousseau, D. L.....St. Joseph Hospital, Mt. Clemens
Ruedisueli, Clarence A.....18215 Utica Rd., Roseville
Salot, R. F.....713 Monitor Leader Bldg., Mt. Clemens
Scher, Joseph N.....130 Cass Ave., Mt. Clemens
Scher, Sydney.....132 Cass Ave. Mt. Clemens
Siegfried, Edward G.....30781 Division St., New Haven
Singer, Nelson.....22100 Gratiot, East Detroit
Smith, Milton C.....50 S. Gratiot, Mt. Clemens
Stone, Elizabeth A.....Romeo
Stryker, O. D.....Macomb Co. Health Dept., Mt. Clemens
Sturm, Fred A.....29405 E. Jefferson St., St. Clair Shores
Suksta, A. W.....18215 Utica Road, Roseville
Test, Frederick C. II.....91 Cass Ave., Mt. Clemens
Thompson, Alfred A.....126 Cass Ave., Mt. Clemens
Ullrich, Russell W.....91 Cass Ave., Mt. Clemens
Weiss, Jack I.....13301 Ludlow, Huntington Woods
Wellard, Henry C.....New Baltimore
Whitley, Alec.....30233 Jefferson, St. Clair Shores
Wilde, M. M.....32171 Mound Road, Warren
Wiley, D. Bruce.....45310 Van Dyke, Utica
Wolfson, V. H.....18 N. Broadway, Mt. Clemens
Wyte, William C.....99 S. Gratiot Ave., Mt. Clemens
Zavela, Daniel.....22644 Gratiot Ave., East Detroit

MANISTEE COUNTY

Hansen, Earnest C.....73 Maple, Manistee
Konopa, John F.....57 Poplar St., Manistee
Lalime, Ruth E.....12395 Lynn, Bear Lake
Lewis, Lee A. (E).....467 Second St., Manistee
Loughrin, J. J.....90 Maple St., Manistee
Miller, Ernest B.....425 River St., Manistee
Oakes, Ellery A.....401 River St., Manistee
Ogilvie, Gordon D.....210 Savings Bank Bldg., Manistee
Ramsdell, Homer A.....Engelman Bldg., Manistee
Rowe, R. E. (M).....137 N. Howard St., Croswell
Schwarz, Marlowe L.....Onekama

MARQUETTE-ALGER COUNTIES

Acocks, J. R.....Morgan Heights San., Marquette
Amolsch, Arthur L.....321 Pine St., Marquette
Baron, Benzoin C.....Munising
Bennett, A. K. (L)....Union Nat. Bank Bldg., Marquette
Bennett, M. C.....Union Nat. Bank Bldg., Marquette
Berry, Robert F.....Bacon Bldg., Marquette
Bertucci, Joseph P.....114 S. First St., Ishpeming
Bolitho, T. B.....425 E. Michigan Ave., Marquette
Casler, W. L.....131 E. Ridge, Marquette
Cooperstock, Moses.....105 S. Front St., Marquette
Corcoran, W. A.....Anderson Bldg., Ishpeming
Drury, C. P. (R)....Marquette Health Office, Marquette
Elzinga, Eugene R.....315 N. Front St., Marquette
Erickson, Arvid W.....114 Front St., Ishpeming
Fennig, F. A.....315 N. Front St., Marquette
Harkin, J. C.....207 Savings Bank Bldg., Marquette
Hirwas, C. L.....Huetter Bldg., Marquette
Hornbogen, D. P.....Hornbogen Bldg., Marquette
Howe, Lloyd W.....Savings Bank Bldg., Marquette
Jaedecke, R. G.....114 Front St., Ishpeming
Knutson, George O.....Twin City Hospital, Negaunee
Kronschnabel, E. F.....Gwinn
Lambert, W. C.....Huetter Bldg., Marquette
LeGolvan, Celestin....221 W. Washington St., Marquette
LeGolvan, P. C. (M).....
Brooke Army Hosp., San Antonio, Texas
Lyons, James W., Jr.....First Nat. Bldg., Marquette
Matthews, Norman L.....St. Lukes Hospital, Marquette
Moore, B. E.....Ishpeming Hospital, Ishpeming
Mudge, William A.....314 Teal Lake Ave., Negaunee
Narotzky, Archie S.....200 S. Main St., Ishpeming
Nicholson, J. B.....
701 N. Olive St., West Palm Beach, Fla.
Paine, R. L.....416 Teal Lake, Negaunee
Schweinsberg, Sara D.....Savings Bank Bldg., Marquette
Sicotte, Isaiah (L).....Michigamme
Swinton, A. L. (E).....Savings Bank Bldg., Marquette
Tearnan, Raymond A.....Munising
Van Riper, Paul (L).....Champion
Waldie, George M.....Ishpeming Hospital, Ishpeming
Wickstrom, George B.....Madigan Bldg., Munising
Williams, R. G.....|.....524 Mather St., Ishpeming

MASON COUNTY

Bacon, Herbert G., Jr.....Scottville
Boldyreff, Ephraim B.....Custer
Boon, A. Floyd (M)....1405 Hargett, Jacksonville, N. C.
Carney, John R.....202 N. Park, Ludington
Carney, Ruth V. C.....202 N. Park, Ludington
Goulet, Leo J.....222 S. James St., Ludington
Hoffman, H. B.....201 N. Washington Ave., Ludington
Martin, William S.....107 W. Ludington Ave., Ludington
Morrow, W. J.....803½ E. Ludington Ave., Ludington
Ostrander, Robert A.....121 Ludington Ave., Ludington
Paukstis, Charles A.....111 E. Court St., Ludington
Slaybaugh, James C.....101 W. Loomis St., Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Anderson, Gordon H.....309 N. Michigan, Big Rapids
Bazuin, C. H.....815 Bertsch Dr., Holland
Bruggema, Jacob.....Evart
Chess, Leo F.....232 Chestnut St., Reed City
Franklin, Benjamin L. (E).....Remus
Hickox, L. A.....211 Rose St., Big Rapids
Ivkovich, Paul.....111 S. Chestnut St., Reed City
Kilmer, David N.....102½ Upton, Reed City
Kilmer, Paul B.....102½ Upton, Reed City
Kowaleski, Edward H.....Remus
Merlo, Frank A.....206 S. Michigan Ave., Big Rapids
Nelson, Lorenzo R.....Baldwin
Peck, Louis K. (E).....Barryton
Treynor, Thomas P.....126 Maple St., Big Rapids
Tyson, J. L.....324 Mecosta Ave., Big Rapids
VanAuken, Edward W.....126 Maple St., Big Rapids
White, John A.....121 S. Michigan Ave., Big Rapids

MENOMINEE COUNTY

Agneberg, Nils O.....531 First St., Menominee
Brukardt, Herman R.....Electric Square Bldg., Menominee
Clay, J. W.....819 First St., Menominee
DeWane, Francis J.....413 Tenth Ave., Menominee
Flanagan, Clarence B.....534 First St., Menominee
Glickman, L. Grant.....948 First St., Menominee
Gonty, Arthur.....St. Joseph's Hosp., Menominee
Heidenreich, John R.....Daggett
Higley, R. A.....1146 10th Ave., Menominee
Jones, William S.....1146 10th Ave., Menominee
Jones, W. S., Jr.....1146 10th Ave., Menominee
Kaye, John T.....1005 10th Ave., Menominee
Kerwell, Karm C.....Stephenson
Peterson, Allen.....Daggett
Sethney, Henry T.....Electric Square Bldg., Menominee
Sweany, S. K.....Pinecrest San., Powers
Towey, John W.....Pinecrest San., Powers

MIDLAND COUNTY

Ballmer, Robert S.....144 W. Main, Midland
Bernier, J. A.....Sanford
Blackhurst, R. T.....Arcade Bldg., Midland
Bowsher, Robert E.....2719 Ashman St., Midland
Bulmer, Dan J.....402 E. Ellsworth, Midland
Buskirk, Maurice D.....501 Ashman St., Midland
Gay, Harold H.....Dow Chemical Co., Midland
Gibson, R. E.....363 Brown St., Beaverton
Gordon, Harold L.....Dow Chemical Co., Midland
Grewe, Norman C.....347½ E. Main St., Midland
Gronemeyer, William H.....127 MacDonald, Midland
Hautau, Emily R.....308 Highland Ave., East Lansing
Holder, Benjamin.....Dow Medical Dept., Midland
Howe, Irvin M.....501 Ashman St., Midland
Howell, R. H.....124 Townsend St., Midland
Ittner, Martin J.....2912 Ashman, Midland
Kaasa, Laurin J.....2011 Ashman St., Midland
Kilian, D. J.....3611 Jefferson, Midland
Linsenmann, Karl W.....312 E. Main St., Midland
MacCallum, Charles L.....1684 W. Sugnet, Midland
Maynard, W. A.....Coleman
Meisel, Edward H., Jr.....413 Lingle Lane, Midland
Murphy, John E.....119 Gordon St., Midland
Pike, Melvin H.....224 E. Larkin St., Midland
Poznak, Leonard A.....1411 Crane Court, Midland
Randolph, Stephen H.....117 Gordon St., Midland
Sherk, Joseph H.....Masonic Bldg., Midland
Towsley, W. D.....Arcade Bldg., Midland
Willison, Charles H.....122 Townsend, Midland

MONROE COUNTY

Ames, Florence D.....2 W. Noble Ave., Monroe
Barrett, C. D.....218 E. First St., Monroe
Blakey, L. C.....222 N. Monroe St., Monroe
Bond, W. W.....4 E. Front St., Monroe
Cigany, Zoltan B.....1402 Monroe, Carleton
Ewing, R. T.....130 Maple Blvd., Monroe
Flanders, J. P.....31 Washington, Monroe
Frary, R. A.....423 E. Elm Ave., Monroe
Freud, John W.....222 N. Monroe, Monroe
Gelhaus, Wm. J.....4 E. Front St., Monroe
Hensel, Hilda M. E.....12 E. Fourth, Monroe
Hunter, M. A.....35 E. Front St., Monroe
Johnson, A. Esther.....31 Washington Ave., Monroe
Kelso, S. Newton, Jr.....127 E. Front St., Monroe
Laboe, Edward W.....106 E. Front St., Monroe
Lammers, Gerald P.....Ida
Landon, Herbert W. (E).....512 Washington, Monroe
Loan, S. B.....31 Washington St., Monroe
Long, Edgar C.....1310 N. Macomb St., Monroe
Long, Sara J.....7136 Rosedale, Allen Park
McDonald, T. A.....17 E. Elm Ave., Monroe
McGeoch, R. W.....633 N. Macomb, Monroe
McMillin, J. H.....423 E. Elm St., Monroe
Meier, Walter A.....106 E. Front St., Monroe
Middleton, S. W.....219 W. Front St., Monroe
Newcomer, Sheldon R.....31 Washington, Monroe
Parmelee, O. E. (L).....Lambertville
Pinkus, Hermann K. B.....12 E. Fourth St., Monroe
Reisig, Albert H.....9 S. Monroe St., Monroe
Sanger, Emerson J.....530 S. Monroe St., Monroe
Sisman, B. J.....325 N. Monroe St., Monroe
Tomlinson, Ledyard H.....Newport
Wagar, Spencer H.....31 Washington St., Monroe
Williams, Robert J.....31 Washington St., Monroe
Williamson, George W.....284 Tecumseh St., Dundee

MUSKEGON COUNTY

Anderson, A. J.....1371 Peck St., Muskegon
Anderson, Axel.....Lakewood Club, Twin Lake
Atkinson, Annie L...2024 Seventh St., Muskegon Heights
August, R. V.....72 E. Broadway, Muskegon Heights
Barnard, Helen S.....Nedeau Bldg., Muskegon
Benedict, Arthur L.....22 W. Southern Ave., Muskegon
Bloom, C. J. (L).....59 E. Larch St., Muskegon
Bolthouse, Robert E.....1214 Peck St., Muskegon Heights
Bond, W. H.....1377 Peck St., Muskegon
Boyd, D. R.....1735 Peck St., Muskegon
Bradshaw, Park S.....1014 Jefferson, Muskegon
Busard, J. Max.....503 Muskegon Bldg., Muskegon
Chapin, William S. (A).....
638 Sanford St., Muskegon Heights
Christophersen, James W.....
1276 Lake Shore Drive, Muskegon
Clapp, Henry W.....88 Strong Ave., Muskegon
Clark, Harry L.....Hackley Hospital Lab., Muskegon
Closz, Harold F.....
809 Hackley Union Bank Bldg., Muskegon
Cohan, Sol G.....1114 Second St., Muskegon
Cronick, Anne B.....1067 Pine St., Muskegon

Dasler, A. F.....1507 Peck St., Muskegon
Diskin, Frank.....410 Jackson Ave., Muskegon
Dykhuizen, Harold D.....
710 Hackley Union Bank Bldg., Muskegon
Ellis, Nicholas J. .....1883 Lake Shore Drive, Muskegon
Emerick, Robert W.....878 N. Second St., Muskegon
Engstrom, Albert O.....Whitehall
Fillingham, Enid.....870 N. Second St., Muskegon
Fleischmann, C. B.....250 W. Webster, Muskegon
Fleishman, Norman A.....1094 Jefferson, Muskegon
Folsom, J. D.....1706 Peck St., Muskegon
Gaikema, Everett W.....Muskegon Co. San., N. Muskegon
Garber, Frank W., Jr.....1178 Third St., Muskegon
Giese, D. H.....210 Lyman Bldg., Muskegon
Gillard, James L...208 Michigan Theater Bldg., Muskegon
Goltz, Martha H.....Montague
Greene, Henry P.....764 Pine St., Muskegon
Griffith, Robert M.....1217 Fifth Ave., Muskegon
Hanley, W. J.....405 Hackley Union Bldg., Muskegon
Harryman, James E.....1129 Peck St., Muskegon
Hartwell, Shattuck W...452 W. Western Ave., Muskegon
Heneveld, Edward H.....1603 Peck St., Muskegon
Heneveld, John.....4238 Harbor Pointe Rd., Muskegon
Heneveld, R. G.....68 E. Broadway, Muskegon Heights
Hennessy, Mary E.....503 Muskegon Bldg., Muskegon
Holly, Leland E.....876 N. Second St., Muskegon
Joistad, Arthur H., Jr.....878 N. Second St., Muskegon
Kane, Thomas J.....179 Strong Ave., Muskegon
Kay, Cecelia S.....1533 Peck St., Muskegon
Keilin, Marie.....403 Michigan Theater Bldg., Muskegon
Kerr, Howard J.....1441 Lakeshore Drive, Muskegon
Lange, Eugene W.....Mercy Hosp., 1520 Fifth, Muskegon
Lapham, Landon M.....Whitehall
Lauretti, Emil J.....815 Hackley Union Bldg., Muskegon
Laurin, Vilda S.....804 Hackley Union Bldg., Muskegon
LeFevre, Louis L.....450 W. Western Ave., Muskegon
LeFevre, William M.....289 W. Western, Muskegon
Loder, Leonel L.....Hackley Union Bldg., Muskegon
Loomis, John L. (R).....W. Quad, Ann Arbor
Mandeville, C. B.....
515 Hackley Union Bank Bldg., Muskegon
Maples, Douglas E.....402 Center St., N. Muskegon
McNair, John N.....967 Second St., Muskegon
Medema, Paul E.....1017 Sanford, Muskegon
Meengs, Marvin B.....1725 Peck St., Muskegon
Miller, Philip L.....1755 Peck St., Muskegon
Mulder, Lambertus.....Hackley Union Bldg., Muskegon
Mulligan, A. W.....1260 Jefferson St., Muskegon
Myer, Clifton G.....1075 Jefferson St., Muskegon
Oden, Constantine L. A.....
804 Hackley Union Bank Bldg., Muskegon
Powers, Lunette I. (E).....337 Morris Ave., Muskegon
Prentice, Edwin W.....1017 Sanford St., Muskegon
Price, Leonard.....1282 Arthur St., Muskegon
Risk, Robert D.....1160 Ransom St., Muskegon
Scholle, Norbert W.....2500 Peck St., Muskegon Heights
Sears, Richard.....Court House, Muskegon
Shebasta, Emil M.....1075 Jefferson, Muskegon
Smathers, W. M.....Muskegon Bldg., Muskegon
Smith, M. Luther.....840 Pine St., Muskegon
Swartout, W. C. (L).....
514 Hackley Union Bank Bldg., Muskegon
Swenson, Leland L.....1706 Peck St., Muskegon
Teifer, Charles A.....407 Muskegon Bldg., Muskegon
Tellman, H. Clay.....
706 Hackley Union Bank Bldg., Muskegon
Thieme, S. W. (L).....Ravenna
Thornton, Eugene S.....
802 Hackley Union Bank Bldg., Muskegon
Toy, Charles M.....1067 Pine St., Muskegon
Tyler, William H.....1435 Peck St., Muskegon
Vanderlaan, John E.....1624 Peck St., Muskegon
Van Gelder, W. E.....
Hackley Union Bank Bldg., Muskegon
Wagenaar, Edward H.....404 Muskegon Bldg., Muskegon
White, W. G., Jr.....
204 Michigan Theatre Bldg., Muskegon
Wiersma, Silas C.....Hackley Union Bldg., Muskegon
Wildgen, Bernard C.....
416 Hackley Bank Bldg., Muskegon
Wilke, Carl A.....Montague
Williams, Edward V...905 Jarman St., Muskegon Heights

NEWAYGO COUNTY

Carter, Laura J.....Grant
Deur, Theodore R.....Grant
Geerlings, Lambert J.....20 N. Division St., Fremont
Klein, J. Paul.....16 W. Sheridan, Fremont
Masters, B. L.....111 W. Dayton St., Fremont
Moore, Hugh R.....38 State St., Newaygo
O'Neill, John W.....351 E. Cherry St., Fremont
Pedelty, Norman.....Newaygo
VandenBerg, Tunis.....20 N. Division Ave., Fremont

NORTH CENTRAL COUNTIES

Backe, John C.....Box 434, Gaylord
Balice, F. W.....117 N. Third St., West Branch
Barstow, Richard G.....Gaylord
Boehm, John D. (R).....West Branch
Clippert, Clarence G.....308 Michigan Ave., Grayling
Coulter, Keith D.....Gladwin
Crandell, C. H.....Howell
Egle, Joseph L.....Northern Michigan TB San., Gaylord
Forney, F. A.....Northern Michigan TB San., Gaylord
Hasty, Earl A.....115 Burgess, West Branch
Hayes, Louis F.....300 McClellan, Grayling
Henig, B. Elmore.....308 Michigan Ave., Grayling
Hornbeck, R. J.....606 Chestnut St., Grayling
Jardine, Hugh M.....109 S. Third St., West Branch
Keyport, Claude R.....308 Michigan Ave., Grayling
Kitti, William H.....Kalkaska
Libke, Robert S.....Gaylord
Martzowka, M. A.....Roscommon
McKillop, G. L.....Gaylord
Oppy, C. L.....Roscommon
Peckham, Richard C.....Gaylord
Rodda, E. H.....Grayling
Schaiberger, George L...707 W. Hought St., West Branch
Stealy, Stanley A.....Box 485, Grayling
Timreck, Harold A.....Gladwin
VanOstan, O. A.....115 Burgess, West Branch

NORTHERN MICHIGAN COUNTIES

Allen, Robert.....Petoskey
Blum, Benjamin B.....Petoskey
Burns, Dean C.....314½ Howard St., Petoskey
Conkle, Guy C. (E).....Boyne City
Conklin, F. L.....Burt Lake
Conti, Joseph B.....Petoskey
Conway, William S.....Burns Clinic, Petoskey
Crippen, Edward F.....126½ State St., Mancelona
Drake, Gerald A.....Petoskey
Duffie, Don H. (L).....Central Lake
Grate, Lawrence E.....304 Mason St., Charlevoix
Hegener, A. J.....Petoskey
Kirk, T. R.....Petoskey
Larson, Walter E.....214 N. Main St., Cheboygan

Lawrie, Guy K. (M) .....
575th Med. Squad., Base Post Office—Box 205
Selfridge AFB
Lentini, Nicholas.....Cheboygan
Lilga, Harris V.....113 Howard St., Petoskey
Litzenburger, Albert F.....Boyne City
Love, James M.....Burns Clinic, Petoskey
Martin, R. C.....Cheboygan
Mateskon, V. S.....Burns Clinic, Petoskey
Mayne, Frederick C.....Cheboygan
McEvoy, Francis J.....245 E. Main St., Harbor Springs
McKnight, Robert.....Petoskey
Palmer, Russell E.....Charlevoix
Pearson, R. E.....Boyne City
Reus, Leonard W.....Petoskey
Rodger, John R.....Bellaire
Saltonstall, Gilbert B.....112 Clinton St., Charlevoix
Savory, John H.....East Jordan
Stringham, James R.....225 Backus St., Cheboygan
Terr, Isaac.....Charlevoix
Vail, Harry F.....St. James
Van Dellen, Jerrian.....East Jordan
Weburg, Kathryn D.....Petoskey
Wood, George .....Onaway

OAKLAND COUNTY

Abbott, James A.....Pontiac State Hospital, Pontiac
Abbott, Vernon C.....1405 Pontiac State Bldg., Pontiac
Adair, Robin.....602 N. Woodward, Birmingham
Adams, Frederick M.....
600 North Woodward Ave., Birmingham
Albrecht, R. W.....2925 Orchard Lake Rd., Keego Harbor
Arnkoff, Harry.....305 First Nat. Bank Bldg., Pontiac
Aulie, H. G.....500 S. Washington, Royal Oak
Baker, Robert H.....
1110 Pontiac State Bank Bldg., Pontiac
Bannow, Robert J...704 Pontiac State Bank Bldg., Pontiac
Barker, Charles P.....Pontiac State Hospital, Pontiac
Barker, Howard B.....1006 Riker Bldg., Pontiac
Bauer, Edward G.....101 N. Saginaw, Pontiac
Bauer, Ernest W.....23005 John R St., Hazel Park
Beattie, W. G.....Professional Bldg., Ferndale,
Beck, Otto O.....280 W. Maple, Birmingham
Bedwell, William L.....Pontiac State Hospital, Pontiac
Belknap, Warren F.....1809 S. Main St., Royal Oak
Berg, R. H.....2 S. Washington, Oxford
Berger, Charles J...1413 S. Washington Ave., Royal Oak
Birmingham, J. R.....1809 S. Main St., Royal Oak
Blackwell, Leonard.....549½ N. Perry St., Pontiac
Blakeney, James.....449 E. Pike St., Pontiac
Blue, Jane.....218 Riker Bldg., Pontiac
Bookmyer, R. M.....390 E. Maple, Birmingham
Boucher, R. E.....617 Washington Sq. Bldg., Royal Oak
Bowers, Charles L.....Riker Bldg., Pontiac
Brown, A. L.....711 Community Bank Bldg., Pontiac
Bullard, R. W., Jr.....20 S. Main St., Clarkston
Burgess, Charles M.....23235 WoodwardAve., Ferndale
Burke, Chauncey G.....1022 Riker Bldg., Pontiac
Butler, Samuel A. (L)....Pontiac State Hospital, Pontiac
Byberg, Robert A.....500 S. Washington, Royal Oak
Calhoun, Ethel T.....707 Lakeview, Birmingham
Campbell, Malcolm D.....
216 Washington Square Bldg., Royal Oak
Carrow, Joyce M.....622 Riker Bldg., Pontiac
Cefai, A. F.....310 Pontiac State Bank Bldg., Pontiac
Christensen, W. L.....109 W. Eleven Mile Rd., Royal Oak
Clarke, Harriett A.....Pontiac State Bank Bldg., Pontiac
Cobb, Leon F.....75½ W. Huron, Pontiac
Cobb, Thomas H.....804 Riker Bldg., Pontiac
Collins, Edward F.....26½ W. Huron, Pontiac
Conrad, C. D.....3027 Woodward, Royal Oak
Cooley, Roy V., Jr.....189 Orchard Lake Ave., Pontiac
Cooper, Robert J.....622 Riker Bldg., Pontiac
Coucke, Henry O.....1148 S. Woodward, Royal Oak
Crissman, H. C.....22748 Woodward Ave., Ferndale
Cudney, Ethan B.....Pontiac Motor Division, Pontiac
Dahlgren, Carl W.....
301½ Orchard Lake Road, Keego Harbor
Darling, C. G., Jr.....1025 Riker Bldg., Pontiac
Darmstaetter, A. A., Jr.....222 E. Maple, Birmingham
Delaney, M. M.....23603 Farmington Road, Farmington
DeLawter, Hilbert H.....
1298 Brookwood Lane, Birmingham
Deutsch, William L.....600 W. First, Huntington Woods
Dobski, Edwin J.....236 Riker Bldg., Pontiac
Dunlap, Gregg L.....
2925 Orchard Lake Ave., Keego Harbor
Dunn, Lewis E.....5876 Thomas, Berkley
Durak, Gerald G...611½ S. Washington Ave., Royal Oak
Durocher, N. E.....605 Pontiac State Bank Bldg., Pontiac
Dustin, R. W.....1800 Graefield Rd., Birmingham
Edwards, J. W.....8400 W. Eight Mile Road, Ferndale
Ekelund, Clifford T.....906 Riker Bldg., Pontiac
Elder, E. E., Jr.....941½ W. Huron St., Pontiac
Endress, Z. F. (M).....
4050 ASU, USAH, Fort Sill, Oklahoma
Evseeff, George S.....4506 Cooper, Royal Oak
Farnham, Lucius A. (L).....538 Riker Bldg., Pontiac
Ferris, Ralph G.....205 Hanna Bldg., Birmingham
Fink, L. Jerome....1411 Pontiac State Bank Bldg., Pontiac
Fitzpatrick, Francis J.....818 Peoples Bank Bldg., Pontiac
Flick, John R.....120 W. Second, Royal Oak
Foust, Earl W.....1625 E. Fourth St., Royal Oak
Fox, Ralph M.....205 Wabeek Bldg., Birmingham
Furlong, Harold A.....932 Riker Bldg., Pontiac
Gaba, H. B.....21721 Dequindre, Hazel Park
Gadbaw, Joseph J.....23603 Farmington Rd., Farmington
Gaensbauer, Ferdinand.....932 Riker Building, Pontiac
Gariepy, Bernard F.....109 W. First St., Royal Oak
Gates, E. M.....206-10 Riker Bldg., Pontiac
Gatley, C. R.....97 N. Perry St., Pontiac
Gatley, L. W.....97 N. Perry St., Pontiac
Gaukler, R. J. (M)..USAH, Ft. Leonard Wood, Missouri
Gehringer, Norman F.....732 Riker Bldg., Pontiac
Geib, Ormond D.....Avon Bldg., Rochester
Geist, Edgar J.....Hills Theater Bldg., Rochester
Gerls, Frank B.....602 Peoples State Bank Bldg., Pontiac
Gibson, James C. (E).....206 E. Commerce, Milford
Gibson, Richard E.....1011 Hazel St., Birmingham
Gibson, Wellington C.....216 Commerce St., Milford
Gill, Matthew J.....324 Riker Bldg., Pontiac
Goode, Norman J., Jr.....109 E. Nine Mile, Ferndale
Gradolph, Paul L.....23338 Woodward Ave., Ferndale
Grant, William A. (L).....Milford
Green, J. D. (M).....222 E. Maple, Birmingham
Green, W. M.....1402 Pontiac State Bank Bldg., Pontiac
Haanes, M. A.....Pontiac State Bank Bldg., Pontiac
Hackett, Daniel.....1205 Peoples State Bldg., Pontiac
Haddock, D. A.....5800 Pontiac Trail, Pontiac
Hagman, George L.....Cranbrook School, Bloomfield Hills
Halsted, Lee H.....33311 Grand River, Farmington
Hammonds, E. E.....209 Wabeek Bldg., Birmingham
Han, Maolin.....3358 Auburn Road, Auburn Heights
Hanna, Carl....c/o Fisher Body Division, GMC, Pontiac
Hardy, George C.....
240 Oak Drive, Box 135-G, R.R. No. 2, Rochester
Harvey, Campbell.....832 Riker Bldg., Pontiac
Hasner, Robert B.....
617 Washington Square Bldg., Royal Oak
Hassberger, J. B.....620 N. Woodward, Birmingham
Hathaway, Clarence L.....33 S. Broadway, Lake Orion
Hathaway, William S.....433½ Main St., Rochester
Hendren, Owen S...1408 Pontiac State Bank Bldg., Pontiac
Henry, Colonel R.....Professional Bldg., Ferndale
Hensley, C. B.....46 W. Flint St., Lake Orion
Hershey, Lynn N.....
Route 1, 31275 Franklin Blvd., Birmingham
Hirt, Harry.....114 S. Lafayette, Royal Oak

Hoekman, Aben..1740 Hamilton Drive, Route 3, Pontiac
Howlett, E. V. (L).....538 Riker Bldg., Pontiac
Hoyt, Donald F...1203 Pontiac State Bank Bldg., Pontiac
Hubert, John R., Jr.,.....606 Riker Bldg., Pontiac
Hull, Robert P.....23625 Woodward Ave., Ferndale
Ignatius, A. A.....1915 E. Nine Mile Rd., Ferndale
Jacobus, Wayne.....931 Covington, Detroit
Keeffe, Eugene J.....St. Joseph Hospital, Pontiac
Kemp, Felix J.....1115 Peoples State Bank Bldg., Pontiac
Kemp, W. L.....525 Southfield Rd., Birmingham
Kendrick, H. F.....206 Riker Bldg., Pontiac
Klewicki, H. A.....125 W. Nine Mile, Ferndale
Koehler, William H.....
629 Washington Square Bldg., Royal Oak
Kozlow, C. S.....4274 N. Woodward Ave., Royal Oak
Kozlow, Louise.....4274 N. Woodward Ave., Royal Oak
Kozonis, M. C.....1006 Riker Bldg., Pontiac
Kuhn, Henry H.....817 E. Eight Mile Road, Hazel Park
Kuhn, R. E. (M).....APO 154, 5th Gen. Hosp., N. Y.
LaCore, I. A.....Pontiac State Hospital, Pontiac
Lahti, Paul T...325 Washington Square Bldg., Royal Oak
LaMarche, Norman O.....2827 Woodward, Berkley
Lambert, Alvin G.....3027 N. Woodward Ave., Royal Oak
Lambie, John S. (L).....280 Aspen Road, Birmingham
Larson, Alvin R.....640 Riker Bldg., Pontiac
Laux, Philip J., Jr.....3027 N. Woodward, Royal Oak
Leaky, Etta Link.....600, 11 Mile Road, Berkley
Levine, Bernard.....25101 Coolidge, Oak Park
Lewis, S. M.....400 W. Nine Mile, Ferndale
Lilly, R. J.....Pontiac State Hospital, Pontiac
Ling, Theodore W.....23603 Farmington Rd,, Farmington
Lockwood, C. E. (L).....Holly
Lowery, A. J.....8124 Meadow, Route 5, Pontiac
Lyons, R. T.....Riker Bldg., Pontiac
Margrave, E. D.....306 W. Ten Mile Rd., Royal Oak
Markle, John G.....617 Washington Sq. Bldg., Royal Oak
Markley, John M.....849 W. Huron St., Pontiac
Marra, J. J.....Pontiac General Hospital, Pontiac
Marsa, P. S.....46 W. Flint St., Lake Orion
Mason, Robert J.....618 N. Woodward, Birmingham
Maxim, E. S.....711 Pontiac State Bank Bldg., Pontiac
McCain, F. H.....296 N. Hunter Blvd., Birmingham
McConkie, J. P.....311-312 Wabeek Bldg., Birmingham
McInerney, T. S.....109 W. Eleven Mile Rd., Royal Oak
McIntyre, K.....779 Grand Marais, Grosse Pointe Park
McNeill, H. H.....83½ S. Saginaw, Pontiac
Mehas, C. P.....1150 Dorchester, Birmingham
Meinke, Herman A.....817 E. 8 Mile Road, Hazel Park
Meisner, Harry E.....10851 W. Ten Mile Road, Oak Park
Meng, R. H.....State Hospital, Crownsville, Md.
Mercer, Frank A...1401 Pontiac State Bank Bldg., Pontiac
Merrill, L. N...330 Washington Square Bldg., Royal Oak
Milgrom, Sidney.....1229 W, Washington, Royal Oak
Miller, H. L...617 Washington Square Bldg., Royal Oak
Miller, Sidney.....604 N. Woodward, Birmingham
Moloney, J. Clark.....414 Arlington, Birmingham
Monroe, John D...Oakland County Health Dept., Pontiac
Morton, J. A. (M).....St. Joseph Hospital, Pontiac
Mumby, C. J.....1409 Pontiac State Bank Bldg., Pontiac
Munson, H. L.....Pontiac Trail, Walled Lake
Nalepa, E. J.....704 Pontiac State Bank Bldg., Pontiac
Naz, John F.....20 S. Main St., Clarkston
Neafie, Charles A. (L).....City Health Dept., Pontiac
Nessel, J. H.....Riker Bldg., Pontiac
Newcomb, Arnold B.....P.O. Box 1036, Berkley
Nichamin, S. J.....25101 Coolidge, Oak Park
Norup, John.....2818 Coolidge Hwy., Berkley
Nosanchuk, Joseph I.....
1215 Pontiac State Bank Bldg., Pontiac
Olsen, Richard E.....St. Joseph Mercy Hospital, Pontiac
Palmer, Hayden D.....506 Riker Bldg., Pontiac
Patrick, C. I.....Dixie Highway, Waterford
Pauli, Theodore.....206 Riker Bldg., Pontiac
Payton, Charles F.....611½ S. Washington, Royal Oak
Pearce, James F.....114 S. Washington, Royal Oak
Pelletier, Charles J.....1914 Dusetta, Royal Oak
Petroff, George N.....
1301 Pontiac State Bank Bldg, Pontiac
Porritt, Ross J.....304 Riker Bldg., Pontiac
Ports, Preston W.....33109 Grand River, Farmington
Prather, F. W.....Milford
Prevette, Isaac C.....215 First Nat. Bank Bldg., Pontiac
Prosser, M. G.....3803 Elizabeth Lake Rd., Pontiac
Quarton, Albert E., Jr.....3027 N. Woodward, Royal Oak
Quinn, James R.....511 Pontiac State Bank Bldg., Pontiac
Raynale, George P. (L)..302 Wabeek Bldg., Birmingham
Read, James Allen.....610 N. Woodward, Birmingham
Reid, Fred T.....Clawson State Bank Bldg., Clawson
Riddle, John (M).....Pontiac State Hospital, Pontiac
Riggs, Harry L.....31 Orchard Lake, Pontiac
Riker, Aaron D.....1012 Riker Bldg., Pontiac
Roehm, Harold R.....322 Wabeek Bldg., Birmingham
Rowley, Laurie G.....
4400 Dixie Highway, Drayton Plains
Rupp, Edson C., Jr.....
Washington Square Bldg., Royal Oak
Rush, Alva D.....114 S. Woodward, Birmingham
Russell, Vincent P.....
624 Washington Square Bldg., Royal Oak
Ruva, J. J.....4463 Dixie Hwy., Drayton Plains
St. John, Harold A.....718 Riker Bldg., Pontiac
Schuneman, Howard....23760 Woodward, Pleasant Ridge
Schlecte, I. C.....Rochester
Schmitt, P. E.....Wash. Square Bldg., Royal Oak
Seaborn, A. J.....1412 S. Washington St., Royal Oak
Seelye, Juliette.....4274 N. Woodward Ave., Royal Oak
Segula, Robert L.....326 Riker Bldg., Pontiac
Sempere, C. R.....326 Riker Bldg., Pontiac
Shadley, Maxwell L.....94 Ottawa Drive, Pontiac
Sheffield, Loren C.....420 Riker Bldg., Pontiac
Sheridan, F. Michael.....
1307 S. Washington, Huntington Woods
Sibley, H. A. (L).....15 Mathews St., Pontiac
Sigler, Louis E., Jr.....920 James K. Blvd., Pontiac
Simpson, E. K. (L)..804 Pontiac State Bk. Bldg., Pontiac
Smith, Carleton A.....Guilford Road, Bloomfield Hills
Smith, Donald S.....824 Riker Bldg., Pontiac
Smith, George E.....
629 Washington Square Bldg., Royal Oak
Somerville, W. J.....23760 Woodward, Pleasant Ridge
Spencer, Lloyd H.....1219 S. Washington, Royal Oak
Spoehr, Eugene L.....22832 Woodward, Ferndale
Spohn, Earl W.....201 S. Center St., Royal Oak
Stageman, John C.....
1203 Pontiac State Bank Bldg., Pontiac
Stahl, Harold F.....Oxford
Stanley, W. F.....1148 S. Woodward, Royal Oak
Starker, C. T. (L).....
716 Community Nat. Bank Bldg., Pontiac
Steffes, Everette.....3345 Coolidge Highway, Berkley
Stein, Edward.....
25622 Coolidge Hwy., Huntington Woods
Steinbach, R. A.....c/o Haven, Rochester
Steinberg, Norman N.....
211 Washington Square Bldg., Royal Oak
Stevens, John M., Jr.....Pontiac State Hospital, Pontiac
Stolpman, A. K.....306 Wabeek Bldg., Birmingham
Sutton, Palmer E.....
629 Washington Square Bldg., Royal Oak
Swickle, Edward F.....17 S. Main, Clawson
Tauber, Abraham..1108 People State Bank Bldg., Pontiac
Tolle, Charles B.....202 Riker Bldg., Pontiac
Uloth, Milton J. (L).....Ortonville
VandenBerg, Kenneth.....
711 Commercial Nat. Bank Bldg., Pontiac
Van Haltern, H. L.....Riker Bldg., Pontiac
Virga, George M.....715 N. Main St., Royal Oak
Wagner, Ruth E.....201 First St., Royal Oak
Wake, Douglas L.....1307 S. Washington, Royal Oak
Watson, Thomas Y.....313 Wabeek Bldg., Birmingham
Webber, L. T.....TB Sanitarium, Pontiac
Weisberg, William W.....
25201 Coolidge Highway, Royal Oak

Wellman, W. W.....103 Clarence, Holly
Wessels, Robert R.....302 Wabeek Bldg., Birmingham
West, C. I.....20879 Bethlawn, Ferndale 20
White, Robert H.....379 Hamilton, Birmingham
Whitehouse, John D.....The Haven, Rochester
Wigent, R. D.....c/o Pontiac Motor Div. GMC, Pontiac
Williams, John P.....1102 Peoples State Bk. Bldg., Pontiac
Willis, Maurice E.....
1411 Pontiac State Bank Bldg., Pontiac
Yoh, H. B.....Clarkston
Young, Arthur R.....906 Riker Bldg., Pontiac
Zimmerman, Walter J.....2946 Bacon Street, Berkley
Zujko, Alphonse J.....
1402 Pontiac State Bank Bldg., Pontiac

OCEANA COUNTY

Diehl, Clarence.....Shelby
Flint, Charles H.....315 State St., Hart
Hasty, Willis A.....405 State St., Shelby
Hayton, A. R. (L).....327 Michigan Ave., Shelby
Mullen, W. R.....Pentwater
Munger, L. P. (E).....Hart
Nicholson, John H. (E).....Hart
Reetz, Fred A. (A).....Shelby
Robinson, Wm. G.....219 State St., Hart
Vrbanac, John J.....22 N. State St., Hart
Wood, Merle G.....19 Courtland St., Hart

ONTONAGON COUNTY

Bender, J. L. (L).....Mass
Hogue, H. B.....Ewen
Lahti, Carl R.....800 Zinc St., Ontonagon
Olmstead, K. L.....141 Maple Ave., White Pine
Strong, William F.....800 Chippewa, Ontonagon

OTTAWA COUNTY

Arendshorst, Wm. (M).....Peoples Bank Bldg., Holland
Beernink, E. H.....222½ Washington St., Grand Haven
Bloemendaal, D. C.....47 E. Main Street, Zeeland
Bloemendal, W. B.....300 Franklin Street, Grand Haven
Boersma, Vernon L.....97 East 30th St., Holland
Boone, Cornelius E.....101½ E. Main St., Zeeland
Bulthuis, Jerry E.....Jamestown
Clark, Nelson H.....11 West Eighth St., Holland
Cook, C. S.....2 E. Eighth St., Holland
DeVries, H. G.....36 E. Eighth St., Holland
DeVries, P. J.....214 Washington, Grand Haven
DeYoung, F. W.....205 W. Savidge St., Spring Lake
Frieswyk, Melvin J.....241 E. Main, Zeeland
Groat, F. L.....631 Franklin St., Grand Haven
Hager, Ralph.....Hudsonville
Hamelink, M. H.....196 W. 32nd St., Holland
Harms, H. P.....2 E. Eighth St., Holland
Heard, William.....414 Franklin St., Grand Haven
Kearney, Joseph B.....33 W. Eighth St., Holland
Kemme, Gerrit J.....R. No. 3, Zeeland
Kitchel, John H.....414 Franklin St., Grand Haven
Kitchel, Mary S.....414 Franklin St., Grand Haven
Kools, William C.....14 W. 8th St., Holland
Kuipers, S. W.....431 Washington St., Holland
Leenhouts, Abraham (E).....642 Columbia St., Holland
Long, C. E. (L).....222 Franklin St., Grand Haven
McArthur, Peter.....414 Franklin St., Grand Haven
Michmerhuizen, R. E.....408 Fulton, Grand Haven
Moerdyk, William G.....132 E. 12th St., Holland
Nichols, Rudolph H.....33 W. 8th St., Holland
Nykamp, Russell.....39 E. Main, Zeeland
Rottschaefer, William (A).....Temple Bldg., Holland
Rypkema, W. M.....228½ Washington St., Grand Haven
Schaftenaar, R. H.....210 River St., Holland
Stobbelaar, Robert.....107 S. 2nd St., Grand Haven
Ten Have, Ralph.....1016 Sheldon, Grand Haven
Ten Pas, Henry.....Hamilton
Timmerman, E. C.....Coopersville
Van Appledorn, C. J.....99 West 23rd St., Holland
VanDerBerg, E. E.....17 W. Tenth St., Holland
Van der Velde, Otto.....35 W. 8th St., Holland
VandeWaa, Alfred J.....200 E. Main St., Zeeland
Van Kolken, P. J.....509 Franklin St., Grand Haven
VerDuin, J. W.....223 Washington, Grand Haven
Wells, K. N.....119 W. Savidge St., Spring Lake
Westrate, Warren K.....17 W. Tenth St., Holland
Westrate, William.....17 W. Tenth St., Holland
Westrate, William, Jr.....17 West Tenth St., Holland
Winter, John K.....10 E. 10th St., Holland
Winter, W. G., Jr.....10 East Tenth St., Holland
Yff, J. H.....511 E. Central Ave., Zeeland
Yonkman, Frederick F...58 Pomery Rd., Madison, N. J.

SAGINAW COUNTY

Ackerman, G. L.....124 S. Jefferson Ave., Saginaw
Albers, M. J. (M)....709 E. Francis St., Corona, Calif.
Alger, George David....1839 N. Michigan Ave., Saginaw
Anderson, William K.....404 S. Warren Ave., Saginaw
App, R. G.....520 W. Genesee, Saginaw
Bagley, Ulysses S.....1401½ N. Sixth St., Saginaw
Berberovich, T. F.....2005 N. Michigan Ave., Saginaw
Bishop, H. M.....515 S. Jefferson, Saginaw
Brender, F. P.....Frankenmuth
Brock, W. H. (L).....9 Merrill Bldg., Saginaw
Bruggers, Lawrence....1703 N. Michigan Ave., Saginaw
Bruton, Martin F.....420 N. Michigan Ave., Saginaw
Bucklin, Robert V.....1447 N. Harrison, Saginaw
Bullington, Bert M.....213 Bearinger Bldg., Saginaw
Busch, F. J.....1731 N. Michigan, Saginaw
Butler, Milton G.....502 S. Jefferson, Saginaw
Cady, Frederick J.....402 S. Jefferson Ave., Saginaw
Cady, F. J., Jr.....402 S. Jefferson St., Saginaw
Cambridge, V. W.....400½ Potter St., Saginaw
Cameron, A. K.....
409 First Savings & Loan Bldg., Saginaw
Campbell, Lloyd A.....335 Brockway Pl., Saginaw
Caumartin, Hugh T...1537 S. Washington Ave., Saginaw
Chisena, Peter R.....6221 Dixie Highway, Bridgeport
Claytor, Archer A.....1000½ N. Third Ave., Saginaw
Comer, Walter H.....107 Hayden, Saginaw
Cortopassi, Andre J.....324 S. Washington, Saginaw
Cortopassi, Vital E.....324 S. Washington Ave., Saginaw
Cory, Charles W.....1227 N. Michigan, Saginaw
Curts, James H.....127 S. Washington, Saginaw
Durman, Donald C.....408 S. Jefferson Ave., Saginaw
Ely, Cecil W.....1820 Janes St., Saginaw
Ernst, Arthur R. (R).....443 S. Weadock, Saginaw
Fleschner, T. E.....7450 W. Birch Run Rd., Birch Run
Friedrick, D. F. (M).....
Box 245, Williams AFB, Chandler, Arizona
Gage, David P...514 First Savings & Loan Bldg., Saginaw
Galsterer, Edwin C.....
507-9 First Savings & Loan Bldg., Saginaw
Gamon, A. E. II.....514 First Savings & Loan, Saginaw
Gardner, J. H.....815 N. Michigan Ave., Saginaw
Gomon, Louis D.....308 Eddy Bldg., Saginaw
Grigg, Arthur (E).....320 N. Michigan Ave., Saginaw
Hand, Eugene A.....211 Bearinger Bldg., Saginaw
Harvie, L. C.....405 Wiechmann Bldg., Saginaw

Heavenrich, Robert M.....529 W. Genesee, Saginaw
Helmkamp, H. O.....333 S. Jefferson, Saginaw
Hester, Eustace G.....2031 N. Michigan Ave., Saginaw
Hill, Victor L.....518 Janes St., Saginaw
Hohn, Fred J. (L).....407 Wiechmann Bldg., Saginaw
Howell, D. M.....506 Wiechmann Bldg., Saginaw
Hyslop, W. T.....1469 N. Harrison, Saginaw
Jaenichen, Robert F. T.....530 Hayden, Saginaw
James, J. W.....1020½ W. Genesee, Saginaw
Jarvi, R. M.....529 W. Genesee, Saginaw
Jiroch, R. S. (L).....202 Wiechmann Bldg., Saginaw
Johnstone, K. T.....63 Florence Ave., Saginaw
Jordan, Leo A.....1524 E. Genesee, Saginaw
Kemp, J. N. (L).....1320 S. Michigan Ave., Saginaw
Kerr, William B.....300 S. Michigan, Saginaw
Keyes, J. T.....7450 Main St., Birch Run
Kickham, Edward F.....309 S. Jefferson Ave., Saginaw
Kleekamp, Herbert G.....1005 Gratiot Ave., Saginaw
Kleinschmidt, E. E.....234 W. Saginaw St., Merrill
Kolesar, R. C. (M).....
1820 Stateville Ave., Charlotte, N. C.
Kowals, Francis V.....6th and N. Washington, Saginaw
Kramer, C. G.....Saginaw Steering Gear, Saginaw
Kretschmer, T. V.....308 Wiechmann Bldg., Saginaw
Kruger, Harold F.....703 W. Genesee St., Saginaw
Lassignal, J. C.....2125 Bay St., Saginaw
Ling, Ernest M. (R).....Spring Lake
Ling, Kenneth C.....Box 135, Hemlock
Lohr, Oliver W.....537 Millard St., Saginaw
Luger, Frederick E.....303 N. Jefferson, Saginaw
Lurie, Robert I.....2525 S. Washington, Saginaw
Lyle, R. C.....3821 State St., Bridgeport
MacKinnon, E. D.....1616 Court St., Saginaw
MacMeekin, James W.....1213 N. Michigan, Saginaw
Manning, John E.....815 N. Michigan, Saginaw
Manning, J. W., III.....515 N. Jefferson, Saginaw
Markey, Francis L.....808 N. Michigan, Saginaw
Markey, Joseph P.....808 N. Michigan, Saginaw
Martzowka, William P.....415½ W. Genesee, Saginaw
Matthews, Harry C.....1227 N. Michigan, Saginaw
Maurer, John A.....20 Hammond Road, Saginaw
Mayne, Harold E.....305 Graebner Bldg., Saginaw
McKinney, Alexander R.....330 S. Washington, Saginaw
Meyer, Henry J. (E).....301 S. Jefferson, Saginaw
Mikan, V. R.....332 S. Main St., Frankenmuth
Miller, G. F.....126 Graham St., Saginaw
Moon, A. R.....305 Second National Bldg., Saginaw
Morgrette, Leonard J.....603 S. Jefferson, Saginaw
Mudd, R. D.....1629 N. Washington St., Saginaw
Murphy, Albert P.....303 N. Michigan Ave., Saginaw
Murray, Charles R.....1827 N. Michigan Ave., Saginaw
Murray, Morris J.....603 S. Jefferson, Saginaw
Nelson, Oscar A.....120 N. Michigan, Saginaw
Northway, R. O.....505 First Savings & Loan, Saginaw
Novy, Frank O.....420 S. Jefferson, Saginaw
Olson, Carl Porter.....1447 N. Harrison, Saginaw
Ostrander, Frank W. (L).....Freeland
Phillips, H. A.....419 First Savings & Loan Bldg., Saginaw
Pickett, W. H. (R).....(No address)
Pietz, Frederick.....221 N. Michigan Ave., Saginaw
Poole, Frank A. (L)..505 Millard St., Apt. 409, Saginaw
Potvin, Clifford D.....2031 N. Michigan Ave., Saginaw
Powers, Robert F.....529 W. Genesee St., Saginaw
Prather, P. E.....1227 N. Michigan Ave., Saginaw
Prior, Richard W.....3625 Webber, Bridgeport
Richards, Ned W.....3518 State St., Saginaw
Richter, Harry J.....604 Second Nat. Bank Bldg., Saginaw
Roggen, Ivan J.....1227 N. Michigan Ave., Saginaw
Ruskin, D. B.....301 Second Nat. Bank Bldg., Saginaw
Ryan, M. D. (E).....635 S. Washington Ave., Saginaw
Ryan, Richard S.....633 S. Washington Ave., Saginaw
Sample, J. T.....606 Rust St., Saginaw
Sargent, Donald V.....1703 N. Michigan Ave., Saginaw
Schaiberger, Elmer G.....1520 N. Michigan Ave., Saginaw
Schneider, A. J. N.....509 S. Jefferson Ave., Saginaw
Schultz, F. R.....Chesaning
Sharp, Martin C.....1803 N. Michigan, Saginaw
Sheldon, Suel A.....124 S. Jefferson, Saginaw
Siler, Delbert E.....1811 Michigan Ave., Saginaw
Skowronski, Casimer A.....1401 E. Genesee, Saginaw
Slack, Walter K.....625 S. Jefferson Ave., Saginaw
Smiley, Gordon L.....2000 Eastview, Louisville, Ky.
Smith, John C.....705 Cooper St., Saginaw
Stahly, E. H.....Saginaw County Hospital, Saginaw
Stander, A. C.....1411 Court St., Saginaw
Stewart, George W.....1902 Janes, Saginaw
Sulfridge, Hugh L., Jr.....305 Graebner Bldg., Saginaw
Sullivan, Frances M.....1213 N. Michigan Ave., Saginaw
Thompson, Arthur B.....
Chev.-Saginaw Transmission, Saginaw
Tiedke, G. E.....309 Graebner Bldg., Saginaw
Toshach, Clarence E.....330 S. Jefferson Ave., Saginaw
Trytten, E. G.....2835 Midland Rd., Saginaw
Volk, V. K.....1501 N. Michigan Ave., Saginaw
Wallace, Herbert C. (M).....(No address)
Weidner, Garland.....City Hall, Saginaw
Weiss, A. W.....308 Eddy Bldg., Saginaw
Westlund, Norman.....1501 N. Michigan, Saginaw
Wright, Edwin M.....404 S. Warren Ave., Saginaw
Yntema, Stuart.....3 East Hannum Blvd., Saginaw

ST. CLAIR COUNTY

Bailey, R. S.....214 Sperry Bldg., Port Huron
Banting, K. C.....403 Peoples Bank Bldg., Port Huron
Barss, Joseph A.....301 National Bank Bldg., Port Huron
Battley, J. C. Sinclair....940 Military Ave., Port Huron
Beck, Frank K.....901 Lapeer, Port Huron
Beer, Joseph F.....104 N. Riverside, St. Clair
Benjamin, Clayton C. (L)....600 Park St., Port Huron
Biggar, R. J.....
Bahrein Petroleum Co., c/o Calif. Tex. Oil Co., 380 Madison, New York 17, New York
Borden, Charles L.....216 Sperry Bldg., Port Huron
Bottomley, Thomas H., Jr.....1102 Sixth St., Port Huron
Boughner, W. H.....325 Pleasant St., Algonac
Bovee, M. E.....2208 Stone St., Port Huron
Bowden, William S.....137 S. Water St., Marine City
Brush, Howard O.....612 Peoples Bank Bldg., Port Huron
Cantwell, John D.....612 Peoples Bank Bldg., Port Huron
Carey, L. M. (R).....
106 N. Pine St., Coronado Station, New Smyrna Beach, Florida
Carney, F. V. (R).....1065 N. Riverside St., St. Clair
Carrie, R. G.....1201 St. Clair River Drive, Algonac
Cleland, William D., Jr.....208 Sperry Bldg., Port Huron
Clifford, Robert P.....506 S. Riverside, St. Clair
Clyne, B. C.....103 N. Main St., Yale
Cole, A. B.....Port Huron Hospital, Port Huron
Cooper, T. H.....911 Lapeer Ave., Port Huron
Coury, John J. Jr.....301 Mich. Bank Bldg., Port Huron
Cripps, J. R.....210 South Main St., Yale
Davison, William T.....312 Sperry Bldg., Port Huron
Douvas, Nicholas..400 Michigan Bank Bldg., Port Huron
Fitzgerald, E. W.....204 Fox Bldg., Port Huron
Gholz, A. C.....208 Sperry Bldg., Port Huron
Gilmore, J. R.....317 Mich. Nat. Bank Bldg., Port Huron
Hazledine, H. J. (M)..301 Mich. Bank Bldg., Port Huron
Holcomb, R. J.....141 Main St., Marine City
Hoyt, Charles N.....940 Military St., Port Huron
Kahn, Oscar B.....Capac
Kesl, George M.....316 Sperry Bldg., Port Huron
Kirker, F. O.....1328 Michigan Blvd., Marysville
Koch, Donald A.....310 E. Water St., Port Huron
Lauridsen, James.....1010 Pine Grove, Port Huron
LeGalley, K. B.....
Bahrein Petroleum Co., c/o Calif. Texas Oil Co., 380 Madison, New York 17, New York
Licker, R. R.....525 Court St., Port Huron

Ludwig, Claude A.....916 Seventh St., Port Huron
Ludwig, F. E.....916 Seventh St., Port Huron
MacPherson, Charlton A. (R).....
Box 2002 Delray Beach, Florida
Martin, Clyde S.....204 Sperry Bldg., Port Huron
McColl, D. J. (E).....312 Sperry Bldg., Port Huron
McCoy, Leslie F.....902 Tenth Ave., Port Huron
Meredith, E. W.....1102 6th St., Port Huron
Novak, Walter S.....213 Sperry Bldg., Port Huron
Patterson, D. Webster.....622 Huron Ave., Port Huron
Pollock, D. A.....140 S. Main St., Yale
Sanderson, Joseph L.....515 Pine St., Port Huron
Sands, G. E.....3179 Armour St., Port Huron
Schaefer, W. A.....302 Michigan Nat. Bank, Port Huron
Schochet, S. S.....Port Huron Hospital, Port Huron
Selby, C. D.....1916 Military, Port Huron
Serniak, J. A.....104 S. Main St., Yale
Sites, E. C.....Michigan Nat. Bank Bldg., Port Huron
Thomas, C. F. (R).....302 Sperry Bldg., Port Huron
Tisdel, James H. (M).....213 Sperry Bldg., Port Huron
Tomsu, G. F.....213 Sperry Bldg., Port Huron
Townley, Charles O.....312 Sperry Bldg., Port Huron
Treadgold, Douglas.....1323 Military St., Port Huron
Ulmer, Arthur H.....303 Sperry Bldg., Port Huron
VanRhee, George....323 Peoples Bank Bldg., Port Huron
Walker, S. C.....312 Sperry Bldg., Port Huron
Ware, John R.....3107 24th St., Port Huron
Wass, Henry C.....115 Adams St., St. Clair
Wetzel, J. O. (R).....Box 4516, Ft. Lauderdale, Fla.
Wilson, N. R.....361 S. Water St., Marine City

ST. JOSEPH COUNTY

Berg, Lawrence A.....106 E. Chicago, Sturgis
Braham, Wilbur G.....105 N. Lakeview, Sturgis
Brunson, Allen E.....206 E. West St., Sturgis
Fiegel, Samuel A.....South Monroe St., Sturgis
Fortner, Roscoe J.....137 Portage, Three Rivers
Gillespie, Eleanor M.....South Fourth St., Sturgis
Jacobowitz, John M.....49½ N. Main St., Three Rivers
Lamb, Harry.....101 N. Maple, Sturgis
Lee, Frank.....Bank Bldg., Burr Oak
Lepard, Olin L.....South Lakeview Ave., Sturgis
Miller, Charles G.....106 W. Chicago Rd., Sturgis
O'Dell, C. W.....117 Spring St., Three Rivers
O'Dell, J. H., Jr.....117 Spring St., Three Rivers
Olney, Harold E.....Leonidas
Pennington, Harry C.....118 S. Kalamazoo, White Pigeon
Penzotti, S. C.....117 S. Spring St., Three Rivers
Porter, C. G.....226 East St., Three Rivers
Shaw, George D.....117 Spring, Three Rivers
Sheldon, John P.....206 E. West St., Sturgis
Slote, Leal K. (E).....157 S. Washington, Constantine
Springer, R. A. (R).....Centreville
Storer, W. R.....County Health Dept., Centreville
Weisheit, H. R.....204 E. West St., Sturgis
Zimont, Raymond D.....100 S. Washington, Constantine

SANILAC COUNTY

Bennett, William G.....Brown City
Blanchard, Ernest W.....Deckerville
Ford, Frances A.....Applegate
Gift, Weldon A.....Marlette
Hart, Robert K.....Howard St., Croswell
Jayson, Michael H.....Marlette
McCrea, John W.....Marlette
McGunegle, K. T.....Sandusky
Muir, Neil.....Croswell
Seager, M. C.....Brown City
Tweedie, G. Evans.....Sandusky
Tweedie, S. Martin.....Sandusky
Winfield, Raymond.....Marlette

SHIAWASSEE COUNTY

Arnold, Alfred L., Jr.....812 Bradley St., Owosso
Austin, Eugene S.....113 E. Williams, Owosso
Bach, Norman F.....113 E. Williams St., Owosso
Brown, Richard C.....113 E. Williams St., Owosso
Brown, Richard J.....113 E. Williams, Owosso
Buzzard, Walter D.....Chesaning
Chipman, E. M.....502 W. Williams, Owosso
Graves, James H.....511 W. Main St., Owosso
Gurden, Elizabeth L.....113 E. Williams St., Owosso
Harkness, Carleton A.....113 E. Williams St., Owosso
Harroun, John E.....306 Matthews Bldg., Owosso
Hoshal, Verne L.....Durand
Hume, Arthur M. (E).....224 N. Ball, Owosso
Janci, Julius S.....215 E. Mason St., Owosso
Lieber, Robert W.....103 E. Clinton, Durand
MacGregor, J. F.....113 E. Williams St., Owosso
McKnight, Edwin R.....320 N. Washington Ave., Owosso
Merz, Walter L.....224 N. Ball St., Owosso
Parker, W. T.....Matthews Bldg., Owosso
Pochert, R. C.....Matthews Bldg., Owosso
Richards, Chester J.....Durand
Sahlmark, Joseph F.....812 Bradley, Owosso
Shepherd, W. F.....Matthews Bldg., Owosso
Weinkauf, William F.....Corunna
Weston, C. L.....Matthews Bldg., Owosso
Willoughby, Wm. A. (A)..29711 Winter Dr., Garden City

TUSCOLA COUNTY

Ballard, James H.....Cass City
Cook, R. R.....Akron
Dickerson, Willard W.....Caro State Hospital, Caro
Donahue, H. T.....Cass City
Elmendorf, Edward N.....Vassar
Flett, Richard O.....Millington
Gilbert, D. E.....Mayville
Gugino, Frank J.....Reese
Howlett, R. R.....624 W. Frank St., Caro
Kaven, G. H. (L).....Unionville
Lindholm, H. O.....Caro State Hosp., Caro
Merrill, Elmer H.....South State St., Caro
Miles, E. J.....Caro
Morris, F. L.....Cass City
Nigg, Herbert L.....Caro
Pelczar, W. E.....321 N. Johnson St., Bay City
Savage, Lloyd L.....General Delivery, Caro
Swanson, E. C.....Vassar
Von Renner, Otto (L).....Vassar

VAN BUREN COUNTY

Boothby, Carl F.....Hartford
Boothby, F. M.....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P. (E).....Decatur
Buckborough, M. W.....South Haven
Cooper, Joseph.....Bangor
Copeland, Evan L.....Decatur
Diephuis, Bert .....South Haven

Dillon, Thomas J.....RFD No. 3, Paw Paw
Gano, Avison.....Bangor
Giffen, John R. (E).....Bangor
Itzen, J. F.....South Haven
Kleber, John A.....South Haven
Loomis, F. J.....Paw Paw
McFadden, R. I.....Bloomingdale
Penoyar, C. L.....South Haven
Spalding, R. W.....Gobles
Staggs, A. L.....Hartford
Steele, Arthur H.....Paw Paw
Tarwilligar, E. H.....326 Michigan Ave., South Haven
Ten Houten, Charles.....Paw Paw
Urist, M. J.....South Haven
William R. Young.....Lawton
Young, W. R.....Lawton

WASHTENAW COUNTY

Allen, Arthur W.....814 Church St., Ann Arbor
Atchison, Russell M.....501 Dunlap W., Northville

Badgley, C. E.....University Hospital, Ann Arbor
Bailey, R. W.....908 Loyola, Ann Arbor
Banghart, Norman L.....200 N. Ingalls St., Ann Arbor
Barker, Paul S.....University Hospital, Ann Arbor
Barlow, R. C.....St. Joseph's Mercy Hosp., Ann Arbor
Barnwell, John B.....
Room 780, Vets. Admin. Bldg., Vermont Ave. at H. St., N.W., Washington 25, D. C.
Barss, William A.....19 N. Adams, Ypsilanti
Bass, Thomas J.....601 Armstrong, Ypsilanti
Bassett, Robert C.....University Hospital, Ann Arbor
Bassett, J. G.....2215 Fuller Road, Ann Arbor
Bassow, Paul H.....406 First Nat. Bldg., Ann Arbor
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1414 David Broderick Tower, Detroit 26
Becker, Joseph W.....513 David Whitney Bldg., Detroit 26
Becklein, Clarence L.....14351 E. Warren Ave., Detroit 13
Beckwith, Carl C.....15625 Twelfth St., Detroit 3
Beckwitt, Morris C.....865 Fisher Bldg., Detroit 2
Bedell, Archie A.....15545 Mack Ave., Detroit
Beebe, W. E.....13365 Michigan, Dearborn
Beecher, A. J.....20390 Harper, Detroit
Beeuwkes, L. E.....12922 W. Warren, Dearborn
Behan, R. C.....2167 Guardian Bldg., Detroit 26
Behn, Claud W.....1546 David Whitney Bldg., Detroit
Beigler, Sydney K.....513 David Whitney Bldg., Detroit
Beitman, Max R.....510 Kales Bldg., Detroit 26
Belanger, Ernest E...10593 W. Jefferson, River Rouge 18
Belanger, W. G.....552 Fisher Bldg., Detroit 2
Belden, D. F.....242 E. Warren, Detroit 1
Belisle, John A.....Wayne County Hospital, Eloise
Bell, J. Kenner.....1654 1st Nat'l Bank Bldg., Detroit 26
Benjamin, William O.....1037 Green Ave., Detroit 9
Bennett, Germany E.....5144 Hastings, Detroit 11
Bennett, Harry B.....942 Maccabees Bldg., Detroit 2
Bennett, Sanford A.....17904 John R St., Detroit 3
Bennett, Stanley.....2900 S. Fort St., Detroit 17
Bennett, William E.....12897 Woodward, Detroit 3
Bennett, Zina B.....28 W. Adams Ave., Detroit 26
Benson, Clifford D.....1515 David Whitney Bldg., Detroit
Benson, Davis A.....3706 Sturtevant, Detroit 6
Benson, P. J.....2900 S. Fort St., Detroit
Benson, Virginia M.....16238 Snowden Ave., Detroit 35
Bentley, Frederick E.....851 S. Main St., Plymouth
Bentley, Neil I. (L).....
1165 David Whitney Bldg., Detroit 26
Berge, Clarence A.....14309 E. Jefferson, Detroit 15
Berger, Edwin L.....
Guimaraes Clinic, 7301 Schaefer, Dearborn
Bergman, Murray Stewart.....4400 Livernois, Detroit 10
Bergman, Theodore I.....16455 Woodward, Detroit 3
Bergo, Howard L.....
13061 Eight Mile Road, East Detroit
Berke, Sydney S.....3333 E. Jefferson, Detroit
Berkey, William E. (R)....915 Andres, Coral Gables, Fla.
Berkman, Ruth.....
2206 David Broderick Tower, Detroit 26
Berlien, Ivan C.....1753 Guardian Bldg., Detroit 26
Berlin, Allen.....722 Maccabees Bldg., Detroit 2
Berman, Lawrence.....1516 St. Antoine St., Detroit 26
Berman, Robert.....509 Francis Palms Bldg., Detroit 1
Berman, Sidney L.....60 W. Hancock, Detroit 1
Bernard, Walter G.....13002 E. Jefferson Ave., Detroit 15
Bernbaum, Bernard.....17320 Livernois, Detroit
Bernstein, Albert E. (L).....2400 Boston Blvd., Detroit 6
Bernstein, Samuel S.....18200 Wyoming, Detroit
Berry, J. E.....18268 Grand River, Detroit 23
Besancon, J. H.....1510 David Broderick Tower, Detroit
Best, T. H. Edward.....9221 E. Jefferson, Detroit
Bethea, J. Hardee.....1005 Kales Bldg., Detroit 26
Bicknell, Edgar A.....13641 Wyoming, Detroit 21
Bicknell, Frank B.....938 David Whitney Bldg., Detroit
Bielawski, J. G.....1042 Maccabees Bldg., Detroit 2
Bigman, Oscar.....Herman Kiefer Hospital, Detroit 2
Billingslea, Thomas H.....2175 E. Willis, Detroit
Birch, John R.....1010 Maccabees Bldg., Detroit 2
Bird, H. Waldo, Jr.....1865 Guardian Bldg., Detroit
Birkelo, Carl C.....Herman Kiefer Hospital,
Taylor & Hamilton, Detroit 2
Birkhill, F. R.....19510 Roslyn Rd., Detroit 21
Birndorf, Leonard.....18004 John R, Detroit
Bittker, Isadore Irving....616 Professional Bldg., Detroit 1
Bittrich, Norbert M.....2500 W. Gd. Blvd., Detroit 8
Black, Perry S.....19431 Van Dyke, Detroit 12

Blain, Alexander W.....2201 E. Jefferson St., Detroit 7
Blain, Alexander W., III.....2201 E. Jefferson, Detroit
Blain, James H., Jr.....119 Kercheval, Grosse Pte.
Blaine, Max.....654 Maccabees Bldg., Detroit
Blair, W. F.....81 E. Kirby, Detroit 1
Bleier, Alfred.....13015 E. Warren Ave., Detroit 13
Bleier, Joseph.....7504 Dexter Blvd., Detroit 6
Bloch, Abraham.....2935 E. Milwaukee, Detroit 11
Block, D. L., Medical Director.....GM Technical Center, Box 56, North End Station, Detroit 2
Blodgett, James B.....606 Kales Bldg., Detroit 26
Blodgett, Wm. E. (L).....602 Kales Bldg., Detroit 26
Blodgett, Wm. H.....603 Kales Bldg., Detroit
Bloom, Albert.....6484 Chene St., Detroit 11
Bloom, Arthur R.....1058 Maccabees Bldg., Detroit 2
Blumenthal, Franz L.....466 Fisher Bldg., Detroit 2
Boccaccio, John L.....16383 Harper, Detroit 13
Boccia, J. J.....15761 E. Warren, Detroit
Boddie, Arthur W.....2737 Chene, Detroit 7
Bogue, Robert E.....15819 Wyoming St., Detroit 21
Bogusz, Ladislaus.....Wayne Co. Gen. Hosp., Eloise
Bohn, Z. Stephen.....327 Professional Bldg., Detroit
Bohne, A. W.....Henry Ford Hospital, Detroit
Boileau, Thornton I.....7700 Russell, Detroit 11
Boland, J. R.....2229 East Jefferson, Detroit
Bolstad, Donald S.....Henry Ford Hospital, Detroit 2
Bolton, Russell P., Jr.....19566 Grand River, Detroit
Boog, Janet M.....Henry Ford Hospital, Detroit 2
Bookmyer, R. H.....17198 Oak Drive, Detroit 21
Bookstein, Abraham M.....1475 Colton, Detroit 3
Boone, Rachel H. C.....18060 Conant, Detroit 34
Borin, Maurice C.....6767 W. Outer Drive, Detroit 21
Bornstein, Sidney.....2033 Puritan, Detroit 3
Bott, Edmund T.....3152 Biddle St., Wyandotte
Botvinick, Isadore.....13701 W. 7 Mile Rd., Detroit 21
Boutrous, T. A.....15801 W. McNichols Rd., Detroit 35
Bovill, E. G.....17555 James Couzens Hwy., Detroit 35
Bower, Donald W.....1336 Southfield, Lincoln Park
Bower, F. T.....70 Kensington Blvd., Pleasant Ridge
Bowers, Leo J.....11200 E. McNichols Rd., Detroit 5
Boyd, John H.....2615 W. Jefferson, Trenton
Boyle, Albert J.....20825 Mack Ave., Detroit 30
Bracken, Andrew H.....13102 W. Warren Ave., Dearborn
Braden, Robert G.....2853 Biddle Ave., Wyandotte
Bradfield, Horace F.....510 E. Warren, Detroit
Bradley, Geo. T.....1201 David Whitney Bldg., Detroit 26
Bradshaw, William H.....4715 St. Antoine, Detroit 1
Brady, Herbert A.....208 Reno Bldg., River Rouge 18
Braley, William N.....12897 Woodward Ave., Detroit 3
Bramigk, F. W.....509-11 Professional Bldg., Detroit 1
Brand, Benjamin.....4500 Wabash Ave., Detroit 8
Braun, Lionel.....516 Fox Theatre Bldg., Detroit 1
Braverman, Morris M.....1222 Maccabees Bldg., Detroit 2
Brekke, Viola G.....2763 W. Eight Mile Rd., Detroit
Bremer, William M.....15641 E. Warren, Detroit 24
Brengle, Deane R. (R).....1229 Washington, Wellington, Kansas
Brennan, M. J.....1176 Grayton, Grosse Pointe
Brent, Morris S.....1330 Strathcona, Detroit 3
Brey, Norman W.....1202 Maccabees Bldg., Detroit 2
Briegel, W. A.....1519 S.E. 14th St., Ft. Lauderdale, Fla.
Briggs, William J.....1202 Maccabees Bldg., Detroit 2
Brines, O. A.....1512 St. Antoine, Detroit
Bringard, Elmer L.....16889 James Couzens, Detroit 27
Brisson, Joseph C.....9191 Whittier, Detroit 24
Bristol, William R.....6142 Bishop Road, Detroit
Broadman, Sylvan A.....16401 Grand River, Detroit 27
Bromme, William.....10 Peterboro, Detroit 1
Bronson, W. W.....22128 Grand River, Detroit 19
Brooks, Charles W.....2033 E. Division Ave., Detroit
Brooks, Clark D. (L).....113 Martin Place, Detroit 1
Brooks, Eugene W.....2290 Ewald Circle, Detroit 6
Brooks, Nathan.....1001 Kales Building, Detroit
Brosius, William L.....Harper Hospital, Detroit
Broudo, P. H.....10 Peterboro, Detroit
Brough, Glen A.....1402 David Whitney Bldg., Detroit
Brown, A. G.....12065 Wyoming, Detroit
Brown, Audrey O.....742 Maccabees Bldg., Detroit
Brown, Carlton F...1229 David Whitney Bldg., Detroit 26
Brown, Charles H.....3152 Biddle Ave., Wyandotte
Brown, Frances.....1940 Lincolnshire, Detroit
Brown, Gordon T.....13000 Hayes Ave., Detroit 5
Brown, Harvey F.....3714 W. McNichols Road, Detroit 21
Brown, Henry S.....18101 James Couzens Hwy., Detroit 2
Brown, John R.....702 Maccabees Bldg., Detroit 2
Brown, Robert A.....3529 Jefferson, Ecorse
Brown, Samuel M.....6315 Ellsworth Ave., Detroit 21
Brown, Stanley H..8544 W. McNichols Road, Detroit 21
Brown, Thomas A.....5430 W. Warren Ave., Detroit
Brownell, Paul G.....18916 Woodward Ave., Detroit 3
Bruder, R. C.....10149 Michigan Ave., Dearborn
Bruehl, Richard A.....471 Fisher Bldg., Detroit
Bruer, E. L.....1495 Fort St., Wyandotte
Bruer, E. S.....12170 Fort St., Wyandotte
Brunke, Bruno B.....7765 Mack Ave., Detroit 14
Brush, Brock Edwin.....2799 W. Grand Blvd., Detroit
Bryan, Donald I...13700 Woodward Ave., Highland Park
Bryan, J. B.....Henry Ford Hospital, Detroit 2 Highland Park
Bryce, John D.....5400 Trumbull, Detroit 8
Buchanan, William Paul.....11751 Grand River Ave., Detroit 4
Budd, A. S.....440 Lake Park Road, Birmingham
Budson, Daniel....10300 W. Seven Mile Road, Detroit 21
Buell, John H.....901 David Whitney Bldg., Detroit 26
Buerki, Robin C.....Henry Ford Hospital, Detroit
Buller, H. L.....4120 Fenkell Ave., Detroit 21
Bunch, D. C., Jr.....Henry Ford Hospital, Detroit 2
Burke, Ralph M.....742 Maccabees Bldg., Detroit 2
Burnham, David C.....13700 Woodward Ave., Highland Park
Burns, Robert T.....16101 Harper Ave., Detroit 24
Burnside, H. B.....7220 Gratiot Ave., Detroit 13
Burnstine, Julius Y.....45 Owen Ave., Detroit
Burnstine, Perry P.....434 W. Palmer, Detroit 2
Burr, George C.....1706 David Whitney Bldg., Detroit 26
Burr, H. Leonard.....168 Fisher Road, Grosse Pointe
Burroughs, R. G.....1449 David Whitney Bldg., Detroit
Burrows, Howard A.....10423 W. Warren, Dearborn
Burstein, Harry S.....2950 W. Grand Blvd., Detroit 2
Burstein, I. Marvin.....2950 W. Grand Blvd., Detroit 2
Burstein, Morris M.....2950 W. Grand Blvd., Detroit 2
Burton, D. T.....54 Arden Park, Detroit
Burton, Irving F.....14624 East 7 Mile Road, Detroit
Bush, Glendon J.....7704 Dexter Blvd., Detroit 6
Bush, Lowell M.....18950 Woodward, Detroit
Buss, W. C.....Henry Ford Hospital, Detroit 2
Butler, Harry J. (L).....33 Waverly, Highland Park 3
Butler, H. R.....3529 W. Jefferson, Ecorse
Butler, John D.....1308 Broadway, Detroit 26
Butler, J. Payne.....3403 W. Warren, Detroit 8
Butler, Lawrence H.....14521 E. Seven Mile Rd., Detroit
Butler, Volney N.....806 Mutual Bldg., Detroit 26
Butterworth, Herman K.....719 Liberty Ave., Lincoln Park
Buttrum, Edward J.....14755 Fenkell, Detroit 27
Byers, Dudley W.....8934 Oakland Ave., Detroit
Cadieux, Henry W. (L)....103 E. Grand Blvd., Detroit 7
Cahalan, Joseph L...214 David Whitney Bldg., Detroit 26
Cain, W. L. (M).....8033 Twelfth St., Detroit 6
Caldwell, George L.....12017 Jos. Campau, Detroit 2
Caldwell, J. R.....2799 W. Grand Blvd., Detroit 2
Cale, Edward E. Jr.....Henry Ford Hospital, Detroit 2
Calkins, H. N.....14970 Robson Ave., Detroit
Callaghan, Thomas T.....312 Professional Bldg., Detroit
Cameron, A. H.....2853 Biddle, Wyandotte
Cameron, D. A.....2255 Fort St., Lincoln Park
Campbell, Charles A.....12922 West Warren, Dearborn
Campbell, Duncan.....9203 Grand River, Detroit 4
Campbell, Duncan A. (E).....1613 David Whitney Bldg., Detroit 26
Campbell, Kenneth N.....Blaine Hospital, Detroit
Campbell, Malcolm D.....10 Peterboro, Detroit 1
Campbell, Mary B.....700 Seward St., Detroit 2
Campbell, Thelma M. Wygant..22375 Garrison, Dearborn

Candler, C. L.....
20040 Mack Ave., Grosse Pointe Woods 30
Canter, Allie L.....13700 Woodward Ave., Detroit 5
Canter, G. E.....13732 Woodward Ave., Detroit 3
Cantor, Meyer O.....666 Maccabees Bldg., Detroit 2
Cantow, L. A.....1123 David Whitney Bldg., Detroit 26
Capano, Oreste A.....16401 Grand River, Detroit 7
Caputo, Joseph M.....22575 Nona Ave., Dearborn
Caputo, Nancy.....18145 Mack Ave., Detroit
Capuzzi, Eugene T.....19214 Votrobeck Drive, Detroit 19
Caraway, Jas. E.....355519 Norris St., Wayne
Carbone, Louis A.....9317 Gratiot, Detroit 13
Carey, Cornelius (L).....9667 Gratiot Ave., Detroit 13
Carlisle, J. C.....2900 S. Fort St., Detroit 17
Carlson, Harold W.....18070 Wildemere, Detroit 21
Carmichael, Edward K.....7815 E. Jefferson, Detroit 14
Carnes, H. E.....Parke Davis & Company, Detroit 32
Carp, Joseph.....8839 Mt. Elliott, Detroit 11
Carpenter, Claire H.....18700 Meyer Rd., Detroit 21
Carpenter, C. J.....3835 Biddle St., Wayne
Carpenter, Glenn B.....
1416 David Whitney Bldg., Detroit 26
Carpenter, William S.....
1317 David Whitney Bldg., Detroit 26
Carr, J. G.....14111 Korte, Detroit
Carroll, Elmer H.....9920 Stoepel Ave., Detroit 4
Carroll, Lona B.....1066 Maccabees Bldg., Detroit 2
Carrick, Lee.....1515 Kales Bldg, Detroit 26
Carson, Herman J.....7745 Puritan, Detroit 21
Carstens, Henry R.....
3706 Manor Rd., Chevy Chase 15, Md.
Carter, John M.....613 David Whitney Bldg., Detroit 26
Carter, L. F.....613 David Whitney Bldg., Detroit 26
Casey, Byron L., Jr.....1865 Guardian Bldg., Detroit
Cashen, Russell M. (A)....Henry Ford Hospital, Detroit 2
Cassidy, William J.....
1737 David Whitney Bldg., Detroit 26
Castle, M. E. (M).....761 Fisher Bldg., Detroit 2
Castrop, Charles W.....10149 Michigan Ave., Dearborn
Catherwood, Albert E.....
1337 David Whitney Bldg., Detroit 26
Caton, Dorothy F.....17144 Oak Dr., Detroit 21
Caughey, Edgar H.....11301 Whittier, Detroit 24
Caumartin, F.E.....15801 W. McNichols Rd., Detroit 35
Cellar, Frank A.....944 Maccabees Bldg., Detroit
Ceravolo, Albert J.....1420 St. Antoine, Detroit 26
Ceresko, A. R.....18650 W. Warren Ave., Detroit 10
Cetnar, E. J. (M).....10492 Merlin, Detroit 24
Chabut, V. George.....206 W. Dunlap, Northville
Chalk, Carl C.....264 Stephens Rd., Grosse Pointe 36
Chall, Henry G.....2941 W. McNichols, Detroit 21
Chapin, Sidney E.....10149 Michigan Ave., Dearborn
Chapman, Aaron L.....2550 Atkinson, Detroit 6
Chapman, Paul T.....1151 Taylor Ave., Detroit 2
Chapnick, H. A.....506 Kales Bldg., Detroit
Charleston, R. A.....15174 Lasher Rd., Detroit 23
Charnas, Sidney.....542 Maccabees Bldg., Detroit 2
Chase, Clyde H.....1002 David Whitney Bldg., Detroit 26
Chase, W. E.....2799 W. Grand Blvd., Detroit 2
Chason, Jacob L.....1512 St. Antoine, Detroit 26
Chatel, Arthur N.....4927 Cadillac Ave., Detroit 13
Check, Frank E.....3439 Iroquois, Detroit 14
Cheng, James T.....1800 Tuxedo, Detroit 26
Cherney, P. J.....Receiving Hospital, Detroit 26
Cherup, Nicholas.....11838 Joseph Campau, Hamtramck
Chesluk, Herman M.....
1312 David Broderick Tower, Detroit
Chester, William P.....5057 Woodward, Detroit 2
Chipman, Willard A.....
14300 W. McNichols Rd., Detroit 35
Chittenden, George E...7815 E. Jefferson Ave., Detroit14
Christopher, James G.....4777 East Outer Dr., Detroit
Chrouch, Laurence A.....18456 Grand River, Detroit, 23
Church, A. S.....10 Peterboro, Detroit
Cioffari, M. S.....19363 James Couzens Hwy., Detroit
Ciprian, Joseph E.....1775 E. Grand Blvd., Detroit
Clapper, Muir.....1512 St. Antoine, Detroit
Clark, Arthur M.....22400 Cherryhill, Dearborn
Clark, B. W. (M).....(No Address)
Clark, Charles J.....Ford Motor Co., Dearborn
Clark, Clarence M.....2605 Holbrook, Detroit 12
Clark, Harry G.....14600 Greenfield, Detroit 27
Clark, Harold E.....17198 Oak Dr., Detroit 21
Clark, William P.....1682 S. Fort St., Lincoln Park
Clarke, Charles N.....2501 W. Grand Blvd., Detroit 18
Clarke, Norman E.....2501 W. Grand Blvd., Detroit 18
Clarke, Robert B.....1112 Kales Bldg., Detroit
Clifford, C. H.....10 Peterboro, Detroit 1
Clifford, John Edward.....
910 David Broderick Tower, Detroit 26
Clifford, R. H.....Henry Ford Hospital, Detroit
Clifford, Thomas P.....
1802 David Whitney Bldg., Detroit 26
Clippert, J. C. (E).....Dearborn Inn, Dearborn
Coan, Glenn L.....2336 Van Alstyne Blvd., Wyandotte
Coates, E. O.....Henry Ford Hospital, Detroit 2
Cobane, John H.....10 Peterboro, Detroit 1
Cochrane, Edgar G.....12805 Hamilton, Detroit 3
Cohen, H. Herbert.....12700 W. 7 Mile Rd., Detroit 21
Cohen, Lewis.....7441 W. 7 Mile Rd., Detroit 21
Cohen, M. F.....2242 Braile, Detroit 19
Cohn, Daniel E.....409 Fox Bldg., Detroit 1
Cohoe, Don A.....18916 Woodward, Detroit 3
Cole, F. H.....1757 David Whitney Bldg., Detroit 26
Cole, James E.....344 Glendale, Detroit 4
Cole, Wyman C. C.....1077 Fisher Bldg., Detroit 2
Coleman, P. F.....987 E. Jefferson, Detroit
Coleman, Margarete W.....58 W. Adams Ave., Detroit 26
Coleman, William G.....20526 Grand River, Redford 19
Collings, M. R.....9201 W. Outer Dr., Detroit 19
Collins, James E.....13103 W. Chicago, Detroit 29
Colvin, Leslie T.....474 Fisher Bldg., Detroit 2
Colyer, Raymond G.....56 Rhode Island, Detroit 3
Comfort, Milton D.....28754 Seneca, Flat Rock
Comstock, Lawrence A.....P. O. Drawer L, Trenton
Condon, Stanley (M).....
3645th Med. Grp., ATRC, Laughlin AFB,
Del Rio, Texas
Conley, L. C. M.....99 Tuxedo, Detroit 3
Connelly, Richard C.....
1645 David Whitney Bldg., Detroit 26
Conner, Edward D.....15778 Birwood, Detroit
Connolly, Frank.....5149 Joy Rd., Detroit 4
Connolly John P.....5149 Joy Rd., Detroit 4
Connolly, P. J.....1317 David Whitney Bldg., Detroit 26
Connors, J. J.....3546 Trumbull, Detroit
Cook, James A.....1860 Ford, Wyandotte
Cook, James C.....Harper Hospital, Detroit 1
Cooksey, Warren B.....62 W. Kirby, Detroit
Cooper, Edmond L.....414 David Whitney Bldg., Detroit
Cooper, James B.....18145 Mack Ave., Detroit 24
Cooper, Ralph Ruehl.....
1515 David Whitney Bldg., Detroit 26
Corbeille, Catherine.....1050 Fisher Bldg., Detroit
Coseglia, Robert P.....7962 Kercheval, Detroit 14
Costello, Russell T.....630 Fisher Bldg., Detroit 2
Cotant, John F.....8935 Fenkell, Detroit 21
Cotruro, Louis D.....3640 McDougall, Detroit 7
Cotton, Schuyler O.....2332 Carson Ave., Detroit 9
Coulter, William J.....5258 Chatsworth, Detroit 24
Courville, Charles J.....1202 Maccabees Bldg., Detroit 2
Cowan, Wilfrid.....6135 Chalmers, Detroit 13
Cowen, Leon B.....1038 Maccabees Bldg., Detroit 2
Cowen, Robert L.....907 Mutual Bldg., Detroit 26
Coyle, J. E.....573 Fisher Bldg., Detroit
Coyne, Douglas Ruthven.....7376 Grand River, Detroit 4
Crews, Thomas H.....772 Fisher Bldg., Detroit 2
Crockett, Emily E.....7263 American Ave., Detroit 10
Croll, Leo J.....1326 Maccabees Bldg., Detroit 2
Croll, Mauriee M.....1326 Maccabees Bldg., Detroit 2
Crook, Charles L.....13700 Woodward, Detroit 3
Cross, Harold E.....
499 Sunningdale, Grosse Pointe Woods 30

Crossen, Robert J.....902 David Whitney Bldg., Detroit 26
Croushore, James E.....573 Fisher Bldg., Detroit 2
Cruikshank, Alexander (E).....228 E. Grand Blvd., Detroit 7
Curhan, Joseph Howard.....18709 Meyer Rd., Detroit 21
Curtis, Frank E.....10 Peterboro, Detroit 1
Curtiss, William P.....3181 E. Jefferson, Detroit 9
Cushing, Russell G.....13424 Gratiot Ave., Detroit 5
Cusick, Paul L.....1108 Mutual Bldg., Detroit 26
Czuj, J. M.....17555 James Couzens, Detroit 35

Dale, Edward C.....28 W. Adams Ave., Detroit 26
Dale, Esther H.....1512 St. Antoine, Detroit 26
Dale, Mark.....3340 E. Eight Mile Rd., Detroit 34
Daly, Byrne M.....120 McLean, Detroit 3
Daly, E. T.....21714 Fenkell, Detroit 23
Danforth, James C., Sr.....20175 Mack Ave., Grosse Pointe Woods
Danforth, James C., Jr.....20175 Mack Ave., Grosse Pointe Woods
Danforth, Mortimer E. (E).....1311 Cadillac Blvd., Detroit 14
Daniels, Lewis E.....460 Fisher Bldg., Detroit 2
Darling, Charles E.....673 Fisher Bldg., Detroit
Darling, Milton A.....673 Fisher Bldg., Detroit 2
Darnley, J. Dana.....Henry Ford Hospital, Detroit 2
Darpin, Peter H.....6602 W. Fort St., Detroit 9
Davidson, David M.....1055 Fisher Bldg., Detroit 2
Davidson, Harry O.....Henry Ford Hospital, Detroit
Davies, T. S. (L).....15425 Kercheval, Grosse Pointe
Davies, Windsor S.....1302 Mutual Bldg., Detroit 26
Davis, G. H. (M).....(No Address)
Dawson, W. A.....25951 Avondale Rd., Inkster
Day, Andrew J.....710 David Whitney Bldg., Detroit
Day, J. Claude.....703 David Whitney Bldg., Detroit
Dean, C. Robert.....Rehabilitation Institute of Detroit 8811 Hamilton Ave., Detroit 2
Deering, Robert J...1392 Coolidge Highway, River Rouge
Defever, Cyril R.....15124 Kercheval, Grosse Pointe
Defnet, William A.....1302 Mutual Bldg., Detroit 26
DeGuistino, Caesar.....1175 E. Grand Blvd., Detroit 11
DeJongh, Edwin.....Diesel Eng. Div. Gen. Motors Corp., 13400 W. Outer Dr., Detroit 23
Delaini, Stella M.....760 Fisher Bldg., Detroit 2
Delaney, Jas. R.....1020 David Whitney Bldg., Detroit 26
DeLawrence, Betty J.....21576 Michigan, Dearborn
DeLawrence, Thomas.....21576 Michigan, Dearborn
Del Giorno, T. E.....St. John's Hospital, Detroit
Demaray, John F.....15312 Burt Rd., Detroit 23
DeNike A. James (L)....1479 E. Jefferson Ave., Detroit 7
Denison, Louis L.....4026 W. McNichols Rd., Detroit 21
Dennis, M. S.....751 S. Military Ave., Dearborn
DePonio, Sylvester A.....20249 Van Dyke, Detroit 34
Deresz, Alphonse R.....19444 Van Dyke, Detroit
Derleth, Paul E.....562 W. Oakridge, Ferndale
Derr, J. W.....702 Maccabees Bldg., Detroit
DeSmyter, George C.....15527 E. Warren, Detroit
De Spelder, Ray E.....2970 W. Grand Blvd., Detroit 11
Deuby, Owen J.....15105 W. Seven Mile Rd., Detroit 21
Deur, Julius J.....2201 E. Jefferson, Detroit 7
DeVault, Marion....Wayne County General Hosp., Eloise
Devine, Herbert W.....22101 Moross Rd., Detroit 24
Dibble, Harry F.....1313 David Whitney Bldg., Detroit 26
Dickson, B. R.....337 W. Grand Blvd., Detroit 16
Dickson, Elias L.....7716 Oakland, Detroit 11
Dickson, Leon A.....5119 Milford, Detroit
Dickson, Mary D.....14827 E. Jefferson, Detroit 15
Diebel, Nelson W.....660 Cadieux, Detroit 30
Dietzel, H. O.....1024 W. Seven Mile Rd., Detroit
Dill, Hugh L.....16114 E. Warren, Detroit 24
Dill, J. Lewis.....2799 W. Grand Blvd., Detroit 2
DiLoreto, Panfilo C.....4345 Harvard Rd., Detroit
DiMaso, G. J.....16545 E. Warren, Detroit 24
Dimond, George E.....861 Monroe Blvd., Dearborn
Dinnen, W. J. (A).....19516 Pierson, Detroit 19
Dittmer, Edwin F.....18412 Mack Ave., Grosse Pointe Farms 30
Dixon, Fred W.....530 N. Telegraph Rd., Dearborn
Dixon, Ray S.....5001 Van Dyke Ave., Detroit 13
Dixon, Robert K.....2501 W. Grand Blvd., Detroit 8
Dodds, John C. (L).....1355 David Whitney Bldg., Detroit 26
Dodenhoff, Charles F.....791 E. Grand Blvd., Detroit 7
Dodrill, F. D.....1553 Woodward, Detroit
Doering, Wendell R.....968 Fisher Bldg., Detroit 2
Doerr, Louis E., Jr.....16401 Grand River, Detroit 27
Dolega, Stanley F.....10053 Gratiot Ave., Detroit
Dolgoff, Sidney.....7301 Schaefer, Dearborn
Dolman, E. N. (A).....32 Mt. Vernon, Detroit 2
Domzalski, Casimer A.....5361 McDougall, Detroit 11
Donald, Douglas.....7815 E. Jefferson, Detroit 7
Donelson, Kater.....27371 Michigan Ave., Inkster
Donovan, Daniel R., Jr.....8378 Grand River, Detroit 4
Donovan, Eugene T.....13365 Michigan, Dearborn
Donovan, Richard S.....968 Fisher Bldg., Detroit 2
Doran, J. H.....15101 Plymouth Rd., Detroit
Dorian, Alan L.....Lynn Hospital, Detroit 17
Dorman, Jack.....18245 Warrington Dr., Detroit
Dorsey, John M.....65 Moss St., Highland Park 3
Doty, Chester A. (L).....1735 David Whitney Bldg., Detroit 26
Doub, Howard P.....Henry Ford Hospital, Detroit
Douglas, Clair L.....405 David Whitney Bldg., Detroit
Dovitz, B. W.....95 Martin Place, Detroit
Dowdle, Edward F.....2501 W. Grand Blvd., Detroit 8
Downer, Ira G.....8445 E. Jefferson Ave., Detroit
Downes, George O.....8007 Harper, Detroit 13
Drake, Ellet H.....Henry Ford Hospital, Detroit 2
Drake, J. J. (R).....402 Locarno Apts., 5121 W. Chicago Blvd., Detroit 4
Dranginis, Edward J.....850 North Rademacher, Detroit 9
Draves, Edward F.....19647 Joy Rd., Detroit 28
Drazek, Joseph A.....8600 W. McNichols Rd., Detroit 21
Drews, Robert S.....12500 Broadstreet, Detroit 4
Drinkaus, H. I. (M).....7th Evac. Hosp., APO 34, c/o PM, New York
Droock, Victor.....10 Peterboro, Detroit 1
Dubin, Joseph J.....10401 W. Chicago Blvd., Detroit 4
Dubnove, Aaron.....2115 W. Grand Blvd., Detroit 8
DuBois, Paul W.....1708 Broderick Tower, Detroit 26
Dubpernell, Karl (E).....3525 28th St., Detroit 10
Dubpernell, Martin S.....4019 Gilbert, Detroit 10
Dubpernell, Robert O.....9125 Meyers Rd., Detroit 28
Dudek, J. J.....16401 Grand River, Detroit 27
Dumke, P. R.....Henry Ford Hospital, Detroit 2
Duncan, James R.....8633 John R. St., Detroit 1
Dundas, Edward M.....4700 Schlaff, Dearborn
Dunlap, Henry A.....7815 E. Jefferson Ave., Detroit 14
Dunlap, Samson F.....9100 Oakland, Detroit
Dunn, Cornelius E.....18145 Mack Ave., Detroit
Durham, Everett.....904 S. Military, Dearborn
Durocher, Edmund J. (L).....4158 W. Jefferson, Ecorse
Durocher, R. E.....4158 W. Jefferson, Ecorse
Dussia, E. E.....20901 Moross Rd., Detroit 36
Dutcher, Dwight J.....21742 Elkhart, Detroit 36
Duwe, Frank A.....25296 Fenkell, Detroit
Dwaihy, Paul J.....14530 E. Warren, Detroit
Dwyer, Francis W.....7448 Linwood, Detroit
Dygert, H. P., Jr.....Receiving Hospital, Detroit 26
Dziuba, John F.....8559 W. Jefferson, Detroit 17
Dzul, Paul.....275 W. Grand Blvd., Detroit 16

Eades, Charles C.....863 Fisher Bldg., Detroit 2
Eadie, G. A.....28400 Plymouth, Livonia
Easterly, Robert L.....2854 Biddle Ave., Wyandotte
Eaton, Crosby D.....462 Fisher Bldg., Detroit 2
Eckhous, Arthur W.....1015 Kales Bldg., Detroit
Eder, Samuel J.....1116 Maccabees Bldg., Detroit 2
Edgar, Irving I.....712 Maccabees Bldg., Detroit 2
Edmonds, Gerald W.....44200 W. 10 Mile Rd., Northville
Edmonds, W. N.....10 Peterboro, Detroit 1
Edmondson, Robert B.....18501 Mack Ave., Detroit 24
Edwards, Gilbert Lloyd.....1841 E. Davison, Detroit 3
Eisman, C. H.....16841 Crawford Lane, Grosse Pointe 30

Eldredge, Edward F.....412 Kales Bldg., Detroit
Elliott, William G.....4101 Fenkell, Detroit 21
Elman, Meyer J.....14002 Woodward, Detroit
Elson, Abraham .....22519 Plymouth, Detroit 28
Elvidge, Robert J.....2900 W. Grand Blvd., Detroit
Emmert, Herman C. (L).....7303 Grandmont, Detroit 10
Engel, E. H.....2336 Van Alstyne Blvd. Wyandotte
English, Leo V. (M).....
Med. Co. 196th Reg., APO 949, c/o PM, Seattle Wash.
Engstrom, F. W.....Veterans Hospital, Dearborn
Eno, Laurel S.....1001 David Whitney Bldg., Detroit 26
Ensign, Dwight C.....Henry Ford Hospital, Detroit
Ensing, Osborn.....758 Fisher Bldg., Detroit 2
Epstein, S. G.....6438 Van Dyke, Detroit 13
Erickson, Eldon W.....2900 S. Fort St., Detroit 25
Erkfitz, Arthur W...545 David Whitney Bldg., Detroit 26
Erman, Joseph M.....9225 Grand River Ave., Detroit 4
Eschbach, Joseph W.....936 S. Military, Dearborn
Estabrook, Bert U (L).....850 Virginia Park, Detroit 2
Ettinger, Clayton J. (L).....18734 Woodward, Detroit 3
Evans, G. P., Jr.....414 David Whitney Bldg., Detroit 26
Evans, Joseph M.....10500 E. Warren Ave., Detroit 13
Evans, Leland S.....20953 Grand River, Redford 19
Evans, W. A., Jr.....552 Fisher Bldg., Detroit 2
Evison, Emerson O.....
1003 Hawthorne Rd., Grosse Pointe Woods 30
Ewing, C. H.....16545 E. Warren, Detroit 24
Eyler, W. R.....Henry Ford Hospital, Detroit 2
Eyres, A. E.....567 Fisher Bldg., Detroit

Fagin, I. Donald.....18254 Livernois, Detroit 21
Falick, Mordecai Louis.....960 Fisher Bldg., Detroit
Falk, Ira E.....7925 W. Vernor Hwy., Detroit 9
Fallis, Lawrence S.....Henry Ford Hospital, Detroit 2
Fandrich, Theodore S.....81 Kercheval, Detroit 30
Farbman, Aaron A.....14515 Kercheval, Detroit 15
Farbman, Simon S.....13300 Fenkell, Detroit 27
Faunce, Sherman P.....8300 Kercheval, Detroit 14
Feicks, William J. (M).....200 Ninth St., Lorain, Ohio
Felcyn, W. George.....2091 W. Grand Blvd., Detroit 8
Feld, David.....520 Maccabees Bldg., Detroit
Feldkamp, Lee E.....9545 Grand River, Detroit
Feldman, N. L.....17338 Woodingham, Detroit
Feldman, Paul.....954 Maccabees Bldg., Detroit 2
Feldstein, Martin Z.....907 Kales Bldg., Detroit 26
Fellers, Ray L.....6505 Grand River, Detroit 8
Fenech, Harold B.....324 Professional Bldg., Detroit
Fenner, William G.....12454 E. Outer Dr., Detroit 24
Fenton, Edwin H.....15125 Grand River Ave., Detroit 27
Fenton, Meryl M.....8600 W. McNichols Rd., Detroit
Fenton, Russell F.....15125 Grand River Ave., Detroit 27
Fenton, Stanley C.....15310 E. Warren St., Detroit 24
Ferrara, Louis V.....13805 Parkgrove Ave., Detroit 5
Ferrara, Virginia M.....18422 Woodward Ave., Detroit 3
Ferrell, Robert D.....20936 Grand River Ave., Detroit 19
Ferris, G. N. (M).....(No Address)
Fettig, Carl A. (E).....6154 W. Fort St., Detroit 9
Figiel, Leo S.....5133 St. Lawrence, Detroit 10
Figiel, Steven J. (M).....Grace Hospital, Detroit 1
Fill, Leon.....1506 David Broderick Tower, Detroit
Finch, Alvis D.....17555 James Couzens, Detroit
Finch, F. Sinclair.....21303 Gratiot, East Detroit
Fine, Edward.....1112 Kales Bldg., Detroit 26
Fink, J. L.....11544 Dexter, Detroit
Finkell, Lawrence J.....15231 W. 7 Mile Rd., Detroit 35
Finkelstein, J. H.....25447 Plymouth Road, Detroit 28
Finkelstein, M. B.....17300 Schaefer Road, Detroit 35
Fischer, Frederick J.....205 Professional Bldg., Detroit 1
Fischhoff, Joseph.....5475 Woodward Ave., Detroit 2
Fisher, Ben.....Roswell Pk. Mem. Inst., Buffalo 3, N. Y.
Fisher, George S.....594 Seyburn, Detroit 14
Fisher, James M.....79 Kercheval, Grosse Pointe
Fisher, O. O. (L).....2475 Iroquois Ave., Detroit 14
Fisher, Ralph L.....8445 Jefferson, East Detroit
Fitzgerald, James M.....2536 W. Grand Blvd., Detroit 8
Flaherty, H. J.....15865 Wyoming, Detroit 21
Flaherty, Norman W.....3677 Fort St., Lincoln Park
Fleming, Joseph L.....Henry Ford Hospital, Detroit 2
Flora, William Robert.....8100 E. Jefferson, Detroit 14
Flower, J. A.....14140 Puritan, Detroit 27
Fogt, Robert G.....11801 Morang, Detroit
Fogt, Herbert E.....11801 Morang, Detroit
Folberg, Irving I.....862 W. McNichols Road, Detroit 3
Foley, Hugh S.....22255 W. Michigan, Dearborn 23
Foley, Joseph M.....1553 Woodward Ave., Detroit 26
Font, Anthony J.....710 Kales Bldg., Detroit 26
Ford, George A. (L).....803 Mutual Bldg., Detroit 26
Ford, Sylvester.....1010 Mutual Bldg., Detroit 26
Ford, Walter D. (E).....4866 Third Ave., Detroit 11
Fordell, F. S.....441 S. Oakwood, Lincoln Park 25
Forgrave, E. G.....18520 Grand River Ave., Detroit 23
Foster, D. P.....Henry Ford Hospital, Detroit 2
Foster, E. Bruce.....853 Fisher Bldg., Detroit 2
Foster, Owen C.....1015 David Whitney Bldg., Detroit 26
Foster, Wallace M.....13700 Woodward Ave., Detroit 23
Foster, William L.....2567 W. Grand Blvd., Detroit 8
Fowler, Melvin E.....247 E. Warren, Detroit
Fox, Leonard.....3152 Biddle St., Wyandotte
Fox, Morris Edward.....10 Peterboro, Detroit 1
Fraiberg, Paul L.....13001 W. Chicago, Detroit 27
France, C. J.....3401 Burns Ave., Detroit 14
Franjac, M. J.....25447 Plymouth Road, Detroit 28
Franzen, Nils A.....19566 Grand River, Detroit 23
Frazer, Mary Margaret.....812 Kales Bldg., Detroit 26
Frederickson, G. C.....3919 John R, Detroit
Free, Harry W.....952 Fisher Bldg., Detroit 2
Freedman, John.....
4853 Second Blvd. at Warren Ave., Detroit 1
Freedman, Milton....18626 Santa Barbara St., Detroit 21
Freeman, D. K.....881 Chalmers, Detroit 15
Freeman, Mable.....1316 Broderick Tower, Detroit 26
Freeman, Michael W.....
401 David Whitney Bldg., Detroit 26
Freeman, Wilmer.....940 E. Seven Mile Road, Detroit 3
Freid, Samuel.....16850 Joy Road, Detroit
Freier, Morton L.....1503 Kales Bldg., Detroit 26
Freitas, E. L.....St. Johns Hospital, Detroit 24
Fremont, Joseph C.....
1202 David Whitney Bldg., Detroit 26
French, D. M.....3751 31st St., Detroit 10
Frey, James L.....755 David Whitney Bldg., Detroit 26
Friedlaender, Alex S.....10300 W. 7 Mile Rd., Detroit 21
Friedlaender, Sidney....10300 W. 7 Mile Rd., Detroit 21
Friedman, David.....2429 E. Milwaukee Ave., Detroit 11
Friedman, I. H.....3773 2nd Ave., Detroit 1
Fritz, G. E.....
St. John Hospital, 22101 Moross Road, Detroit 21
Frothingham, George E. (E).....
707 David Whitney Bldg., Detroit
Fryfogle, James D.....655 Fisher Bldg., Detroit 2
Fulgenzi, Andrew A.....7445 Mack Ave., Detroit
Fuller, Hugh M.....1257 David Whitney Bldg., Detroit 26
Fulton, H. E. Jr.....Harper Hospital, Detroit 1
Fulton, William James.....
3-204 General Motors Bldg., Detroit 2

Gaber, Ben.....12244 Dexter, Detroit
Gaffney, J. M. (A).....13600 Ohio, Detroit 4
Gagliardi, C. A.....Lynn Hospital, Detroit 17
Gagliardi, Raymond A. E.....2900 South Fort, Detroit
Gajewski, J. E.....Parke Davis Company, Detroit 32
Galantowicz, Henry C.....7433 Michigan, Detroit 10
Galdonyi, Laslo.....2311 Broderick Tower, Detroit 26
Galdonyi, Nicholas L.....8001 W. Jefferson, Detroit 17
Galerneau, D. B.....7394 Engleman, Centerline
Galvin, Paul P.....7416-12th St., Detroit 6
Gannan, A. M.....4515 Trumbull Ave., Detroit 8
Ganos, Thomas,.....6525 Park, Allen Park
Ganschow, John H.....10025 Nadine, Huntington Woods
Gardner, Lawrence Wm.....
18782 Glenwood Ave., Lathrup Village, Birmingham
Gardner, Max L.....812 Kales Bldg., Detroit
Gariepy, Louis B.....16401 Grand River Ave., Detroit 27
Gariepy, L. J.....16401 Grand River Ave., Detroit
Gass, H. Harvey.....815 Kales Bldg., Detroit
Gaston, Herbert B.....871 Fisher Bldg., Detroit 2

Gates, Nathaniel (L).....10 Peterboro, Detroit 1
Gaynor, Alex.....1326 E. Seven Mile Road, Detroit 3
Gehring, Harold W.....767 Fisher Bldg., Detroit 2
Geib, Ledru O. (L).....3528 Van Dyke St., Detroit 14
Geitz, William A.....7234 E. Forest Ave., Detroit 13
Gelbach, Philip D.....2900 S. Fort St., Detroit 25
Gellert, I. S. (L)....1229 David Whitney Bldg., Detroit 26
Gemeroy, J. C.....664 Fisher Bldg., Detroit 2
Gerisch, Robert A.....
1217 David Whitney Bldg., Detroit 26
Gerondale, Edmond J.....750 Fisher Bldg., Detroit 2
Gibson, Dumbar P.....1098 E. Grand Blvd., Detroit 7
Giese, F. W.....18526 Schoolcraft, Detroit
Gigante, Nicola.....10 Peterboro, Detroit
Gigliotti, David.....Providence Hospital, Detroit
Gilbert, H. R.....13146 Phelps, Wyandotte
Gillespie, Stephen M.....1011 Haigh St., Dearborn
Gillman, R. W. (E).....61 Peterboro, Detroit 1
Gilpin, W. A.....4560 Niagara Lane, Route 1, Birmingham
Gimbel, N. S.....1512 St. Antoine, Detroit 26
Ginsberg, Harold I.....1328 Maccabees Bldg., Detroit
Gitlin, Charles.....1610 Glendale St., Detroit 6
Gitlin, J. R.....6502 Chene, Detroit 11
Gittins, Perry C.....732 Maccabees Bldg., Detroit 2
Givens, D. H.....3453 Charlevoix, Detroit 7
Glasgow, Gordon K.....
1170 Harvard Road, Grosse Pointe 30
Glassman, Samuel.....60 W. Hancock, Detroit 1
Glazer, Walter S.....8600 W. McNichols Rd., Detroit 21
Gleason, John E. (L).....
17401 Pontchartrain Drive, Detroit 3
Glees, John L.....11631 Mack, Detroit
Glemet, Raymond B.....3314 Bagley, Detroit 16
Glessner, J. R., Jr.....Henry Ford Hospital, Detroit 2
Glowacki, B. F.....1144 Maccabees Bldg., Detroit 2
Goerke, Elmer A.....3663 Goddard Road, Romulus
Goetz, Angus G.....710 David Whitney Bldg., Detroit 26
Goins, W. F.....6675 Tireman, Detroit 10
Goldberg, Arthur.....340 E. 8 Mile Road, Detroit 3
Goldberg, Harry H.....514 Fox Theater Bldg., Detroit 1
Goldberg, Nathan H.....514 Fox Theater Bldg., Detroit 1
Goldfaden, Alfred.....6658 West Fort St., Detroit
Goldin, M. I.....632 Maccabees Bldg., Detroit 2
Goldman, Abe A.....1013 Kales Bldg., Detroit
Goldman, Aubrey.....909 Kales Bldg., Detroit 26
Goldman, Perry.....1318 Maccabees Bldg., Detroit 2
Goldstein, Abe S.....16861 Wyoming Ave., Detroit 21
Goldstein, Sidney.....14530 E. Warren, Detroit 15
Goldstone, R. R.....10 Peterboro, Detroit 1
Gollman, Maurice D.....918 Maccabees Bldg., Detroit 2
Gonne, William S.....619 David Whitney Bldg., Detroit 26
Goodman, H. L.....1512 St. Antoine, Detroit 26
Goodman, Max M.....9246 Grand River, Detroit
Goodman, Virgil P.....3540 Somerset, Detroit 24
Goodwin, W. W.....41001 Seven Mile Road, Northville
Gordon, John W. (R).....12700 Mendota, Detroit
Gordon, W. E. Jr.....14820 Rosemont, Detroit
Gordon, William H.....
1102 David Whitney Bldg., Detroit 26
Gorelick, Martin J.....23901 Michigan Ave., Dearborn
Gorning, Raymond P.....857 Marlborough, Detroit 15
Goryl, Stephen V.....9953 E. Forest, Detroit 13
Goss, Samuel B.....10 Peterboro, Detroit
Gostine, Edmond.....
9758 Chalmer Ave. at Longview, Detroit
Gottschalk, Fred W.....1314 Maccabees Bldg., Detroit 2
Goudie, F. D.....18900 Sorrento Ave., Detroit
Gould, S. Emanuel.....Eloise Hospital, Eloise
Gourley, E. V.....16901 James Couzens, Detroit
Goux, Raymond S...545 David Whitney Bldg., Detroit 26
Grace, Joseph M.....17505 Parkside, Detroit
Graff, J. M.....7305 Joseph Campau, Detroit 11
Graham, J. A.....4102 Brush, Detroit 1
Graham, John G. Jr.....7815 E. Jefferson, Detroit 14
Grain, Gerald O.....Henry Ford Hospital, Detroit 2
Grajewski, Leo E.....2201 E. Jefferson Ave., Detroit 7
Gramley, William.....13328 E. Jefferson Ave., Detroit 15
Granger, Francis L.....14160 Gratiot Ave., Detroit 5
Granger, G. R.....705 David Whitney Bldg., Detroit 26
Grant, A. H.....18024 Sorrento, Detroit 35
Grant, H. E. (L).....Lewiston
Gratton, Henri L.....1301 Kales Bldg., Detroit 26
Gravelle, Lawrence J.....
1036 David Whitney Bldg., Detroit 26
Gray, Jacques Pierce.....1415 Parker, Detroit 14
Greek, Louis M.....12901 Gratiot, Detroit 5
Green, Ellis R.....5172 Scotten Ave., Detroit 10
Green, Lewis.....13000 Grand River, Detroit 27
Green, Louis M.....14636 E. Seven Mile Road, Detroit 5
Green, Nelson W.....15819 Wyoming, Detroit 21
Green, R. S.....Wayne County General Hosp., Eloise
Green, S. W.....2631 Woodward Ave., Detroit 1
Green, W. E.....9825 Grand River Ave., Detroit 4
Greenberg, Jack R.....15473 W. 7 Mile Road, Detroit 35
Greenberg, J. J.....7441 W. 7 Mile Road, Detroit 21
Greenberg, M. Z.....9105 Van Dyke, Detroit
Greene, John B.....2730 Hastings St., Detroit 1
Greenidge, Robert I.....4839 Beaubien St., Detroit 1
Greenlee, William Tate.....15053 Maddelein, Detroit 5
Greenslit, Frank S.....Veterans Adm. Hospital, Dearborn
Gregory, L. J.....2325 E. Grand Blvd., Detroit
Greiner, Bert A.....13739 Gratiot, Detroit 5
Grekin, John N.....7441 W. 7 Mile Road, Detroit 21
Greifenstein, F. E.....1512 St. Antoine, Detroit 26
Griffin, J. P.....17555 James Couzens, Detroit 35
Griffin, Robert J.....20227 Lancaster, Detroit 24
Griffith, A. J.....14049 Warwick Road, Detroit
Griffiths, Sidney.....15400 Plymouth Road, Detroit 27
Grimaldi, G. J.....2983 Seminole, Detroit
Grino, Antonio.....Veterans Adm. Hosp.,Dearborn
Grinstein, Alexander.....18700 Woodingham, Detroit 21
Grob, Otto.....651 Fisher Bldg., Detroit 2
Gross, Louis.....18937 Van Dyke, Detroit
Grossman, Sol.....538 Maccabees Bldg., Detroit 2
Grotz, Genevieve A.....22148 Michigan Ave., Dearborn
Gudes, David S.....1080 Fisher Bldg., Detroit
Guerrero, Jose.....13535 Woodward, Detroit
Guimaraes, A. S.....7301 Shaefer Highway, Dearborn
Guinan, G. E.....3436 Sophia St., Wayne
Gulick, Arthur E...1429 David Whitney Bldg., Detroit 26
Gurdjian, E. S.....840 David Whitney Bldg., Detroit 26
Gurskis, Eugenia.....504 Kales Bldg., Detroit
Gutov, Benjamin R.....602 Maccabees Bldg., Detroit
Guyton, J. S.....Henry Ford Hospital, Detroit 2

Hack, D. W.....14453 Cedargrove, Detroit 5
Hacker, Elaine M.....2201 E. Jefferson, Detroit
Haefele, Leslie P.....29108 Ford Road, Garden City
Hagge, D. R.....1201 David Whitney Bldg., Detroit 26
Haidostian, B. H.....18456 Grand River Ave., Detroit 23
Haitinger, K. S.....7850 E. Jefferson, Detroit
Haking, Leonard.....9661 Gratiot, Detroit 13
Hale, Arthur S.....1501 David Whitney Bldg., Detroit
Haley, W. A.....3631 McClellan, Dertoit 14
Hall, E. Walter.....10 Peterboro, Detroit 1
Hall, James A. J.....28 W. Adams St., Detroit 26
Hall, Ralph E.....10 Peterboro, Detroit 1
Hall, Robert J.....6014 W. Fort St., Detroit 9
Hall, Winthrop D.....6 Cherry Hill Court, Dearborn 7
Hallen, Leonard J.....14001 Greenfield, Detroit
H'Amada, Norman K.....904 Maccabees Bldg., Detroit 2
Hamburg, R. H...1515 David Whitney Bldg., Detroit 26
Hamburger, A. C.....
1512 David Broderick Tower, Detroit 26
Hamil, Brenton M.....Henry Ford Hospital, Detroit
Hamilton, Norman C.....14555 Wyoming, Detroit 21
Hamilton, W. F. (L).....
58 W. Adams Ave., Suite 310, Detroit 26
Hamilton, William.....13836 Woodward Ave., Detroit 3
Hammer, Edwin J.....16616 Mack, Detroit 24
Hammer, Roy W.....16620 E. Warren, Detroit
Hammond, Arthur E.....
1863 David Whitney Bldg., Detroit 26
Hammond, J. L. (L).....Gen. Del., Escondido, Calif.
Hand, Fordus V.....81 East Kirby, Detroit 2
Hank, Emil.....Providence Hospital, Detroit 8

Hansen, Frederick E.....
120 Glynn Court, Apt. 700, Detroit 2
Hanser, Joshua (L).....2730 E. Jefferson, Detroit
Harelik, E. W.....614 Maccabees Bldg., Detroit
Harkaway, Roman W.....19125 Van Dyke, Detroit 34
Harley, Garth H.....834 N. York, Dearborn
Harley, Louis M.....4100 W. McNichols Road, Detroit 21
Harm, Winfred B.....5884 West Vernor Hgwy, Detroit 9
Harmon, Walter.....2510 E. Davison, Detroit 12
Harper, Jesse T.....1248 David Whitney Bldg., Detroit 26
Harrell, Voss,.....806½ N. Oakwood Blvd., Dearborn
Harrington, Frank L.....8935 Fenkell, Detroit 21
Harris, Arthur D. (M).....8943 Twelfth St., Detroit
Harris, Harold H.....8011 W. Vernor Highway, Detroit
Harris, Ivor David..817 David Whitney Bldg., Detroit 26
Harrison, Wesley, Jr.....4847 Iroquois, Detroit 13
Harrison, W. L.....3233 Lawrence, Detroit
Hart, Charles E.....9341 Moffat Ave., Detroit
Hart, John Clarence.....9341 Moffat, Detroit
Hartkop, Henry H.....16321 Mack Ave., Detroit 24
Hartman, F. W.....Henry Ford Hospital, Detroit 2
Hartquist, R. J.....1495 Fort St., Wyandotte
Hartzell, John B.....7815 E. Jefferson, Detroit 14
Hasley, Clyde K...1429 David Whitney Bldg., Detroit 26
Hasley, Daniel E.....1401 Rivard, Detroit 7
Hassig, W. W.....14504 Mack Ave., Detroit 15
Hastings, Orville J.....15744 Harper, Detroit 24
Hathaway, Hubert R.....Ford Motor Co., Dearborn
Hause, Glen E.....16401 Grand River, Detroit 27
Hauser, I. Jerome.....7411 Third Ave., Detroit 2
Hauser, John E.....671 Fisher Bldg., Detroit 2
Hauser, Maurice J.....7411 Third Ave., Detroit
Havers, Howard.....1032 Maccabees Bldg., Detroit 2
Hawkins, James W.....14237 Greenfield, Detroit 27
Hazen, Roy S.....20526 Grand River Ave., Detroit 23
Heath, Leonard P.....
1457 David Whitney Bldg., Detroit 26
Heavner, Lyle E.....119 Kercheval, Detroit
Hecht, Manes S.....
25622 Coolidge Highway, Huntington Woods
Hedgeman, E. C.....3131 Hastings, Detroit 1
Hedges, Frank W.....294 Riverside Drive, Detroit 6
Heenan, Theophilus H.....
1409 David Whitney Bldg., Detroit 26
Heideman, Louis E.....12244 Dexter Blvd., Detroit
Heldt, R. F.....18491 Ardmore, Detroit 35
Heldt, Thomas J. (L).....Henry Ford Hospital, Detroit 2
Hellems, Harper Kieth.....1512 St. Antoine, Detroit
Hendelman, Manuel H.....14350 Harper, Detroit 13
Henderson, Allison B.....5320 John R, Detroit 2
Henderson, Arthur B.....10452 Mack, Detroit
Henderson, Charles W.....853 Fisher Bldg., Detroit
Henderson, Harold.....852 Fisher Bldg., Detroit 2
Henderson, Hugh (M).....
109th Field Hosp., APO 541, USAF, New York
Henderson, John C...316 Chalfonte, Grosse Pte. Farms 36
Henderson, Leslie T.....13038 E. Jefferson, Detroit 15
Henderson, William E.....5349 Van Dyke Ave., Detroit 13
Hendry, H. W.....2716 Rochester, Detroit
Henig, Fred N.....7605 W. Seven Mile Road, Detroit 21
Henkin, W. A.....19166 James Couzens, Detroit 35
Henrich, Lawrence E.....2501 W. Grand Blvd., Detroit 8
Herbst, Harold B.....17300 Schaefer Road, Detroit 21
Herkimer, Dan R.....1802 Buckingham, Lincoln Park 25
Herrold, Rose E.....1277 E. Grand Blvd., Detroit 11
Herschelmann, Roy E.....
3343 Gratiot Ave. at Mack, Detroit 7
Hertzler, Jack H.....307 David Whitney Bldg., Detroit
Herwick, John T.....Henry Ford Hospital, Detroit 2
Hess, Murray W...13732 Woodward Ave., Highland Park
Hesselschwerdt, D. W.....3919 John R, Detroit 1
Hewitt, Leland V.....917 David Whitney Bldg., Detroit 26
Hewitt, M. I.....Parke, Davis & Company, Detroit 32
Hewitt, Robert S.....2255 Fort St., Lincoln Park
Heyman, Louis....19001 W. Seven Mile Road, Detroit 19
Heyner, Stanley A.....3424 Oakman Blvd., Detroit 4
Hickey, Joseph.....6004 W. Fort St., Detroit 9
Hicks, Fred G.....7301 Schaefer Road, Dearborn
Higbee, Arthur L.....429 E. Grand Blvd., Detroit 7
Hileman, S. Lee.....4043 W. Jefferson, Ecorse
Hill, E. J., Jr.....1536 David Whitney Bldg., Detroit 26
Hill, Gerald.....752 Book Bldg., Detroit
Hill, Welford T.....6303 Mack Ave., Detroit
Hillenberg, Sidney J.....20215 W. 7 Mile Road, Detroit
Hillenbrand, Alfred E.....14321 Kercheval, Detroit 15
Hiller, Glenn I.....13700 Woodward Ave., Detroit 3
Hiller, H. M.....987 E. Jefferson, Detroit 7
Hillier, Leland G.....18750 Woodward Ave., Detroit 3
Hilton, William E.....13902 Mack, Detroit 15
Hiratzka, Tomiharu.....1512 St. Antoine, Detroit
Hirschfield, A. H.....829 Fisher Bldg., Detroit
Hirschman, L. J. (E)....2619 Munson Ave., Traverse City
Hoagland, Thomas V.....81 E. Kirby, Detroit
Hobbs, Donald V.....17357 Fenkell, Detroit 27
Hochman, Morton M...16633 Plymouth Road, Detroit 27
Hodges, Jason.....
1200 S. Oxford Road, Grosse Pointe Woods 30
Hodgkinson, C. P.....Henry Ford Hospital, Detroit
Hoffer, Thomas.....6825 Allen Road, Allen Park
Hoffman, Edward A.....7615 W. Vernor Highway, Detroit
Hoffman, E. S.....766 Fisher Bldg., Detroit 2
Hoffman, Harry Y.....15085 E. 7 Mile Road, Detroit 5
Hoffman, Henry A.....10015 E. Outer Drive, Detroit 24
Hoffman, Martin H.....
1311 David Whitney Bldg., Detroit 2
Holcomb, August A.....117 W. Wing St., Northville
Holdredge, Jean M.....2514 Biddle, Wyandotte
Hollander, A. J.....8026 Michigan Ave., Detroit 10
Hollis, Henry B.....6809 Sarina, Detroit 10
Holmes, Alfred W.....8802 Michigan, Detroit 10
Holt, C. J., Jr.....Veterans Adm. Hosp., Dearborn
Holt, Henry T.....5050 Cass, Detroit 2
Honhart, Fred L.....1405 Berkshire Rd., Grosse Pointe 30
Honor, William H. (L).....2966 Biddle, Wyandotte
Hookey, John A.....2918 Biddle, Wyandotte
Hooper, Norman L.....6 Port Drive, Detroit
Hoops, George B. (E).....754 Fisher Bldg., Detroit
Hopkins, J. E.....6381 W. Fort St., Detroit 9
Horkins, E. J.....14300 W. McNichols Road, Detroit 35
Horkins, Harold A.....893 Lakewood, Detroit
Horny, Hugo O.....11600 Whittier, Detroit 24
Horrigan, T. F.....St. Johns Hospital, Detroit 24
Horton, Reece H.....938 David Whitney Bldg., Detroit 26
Horvath, James J...1337 David Whitney Bldg., Detroit 26
Horvath, Louis O.....9122 W. Fort St., Detroit 9
Horwitz, John B.....
1208 David Broderick Tower, Detroit 26
Hotchkiss, Loris M.....33220 W. 7 Mile Road, Livonia
House, W. W.....10350 Twelfth St., Detroit 6
Howard, Austin Z.....825 David Whitney Bldg., Detroit 26
Howard, Philip J.....Henry Ford Hospital, Detroit 2
Howard, W. L.....Maybury San., Northville
Howell, Bert F.....10800 Whittier, Detroit 24
Howell, James T.....Henry Ford Hospital, Detroit 2
Howes, Homer A.....1515 David Whitney Bldg., Detroit
Howes, Willard Boyden.....1800 Tuxedo, Detroit 6
Howlett, Howard T.....868 Fisher Bldg., Detroit 2
Hranchook, Michael.....5042 Haverhill, Detroit 24
Hromadko, Louis.....1075 Fisher Bldg., Detroit 26
Hubbard, John P., Jr...1130 E. Grand Blvd., Detroit 7
Hubbard, Ralph G.....14800 Prevost, Detroit 27
Huber, P. J.....10 Peterboro, Detroit 1
Hudson, J. Stewart....17443 E. Jefferson Ave., Grosse Pte.
Hudson, William A.....
602 David Whitney Bldg., Detroit 26
Huegli, Wilfred A.....16840 E. Warren, Detroit 24
Hull, LeRoy W.....1701 David Whitney Bldg., Detroit 26
Huminski, T. S.....19244 Van Dyke, Detroit 34
Hummel, Arthur R.....8045 E. Jefferson, Detroit
Hunt, T. H.....19431 Van Dyke, Detroit 12
Hunt, Verne G.....723 David Whitney Bldg., Detroit 26
Hunter, Basil H.....13341 Livernois, Detroit 4
Hunter, Elmer N.....7615 W. Vernor Highway, Detroit 9
Hurd, Brooks H.....20187 Schaefer Road, Detroit 21

Husband, Chas. W.....3810 Northwestern Ave., Detroit 6
Husband, R. C.....3810 Northwestern, Detroit 6
Hyatt, Jarvis M.....22340 Michigan, Dearborn
Hyde, Frederick W...6104 W. Vernor Highway, Detroit 9
Hyde, Frederick W. Jr.....Grace Hospital, Detroit 1
Hyland, John R.....13030 Mack Ave., Detroit 15
Hyman, Samuel J.....27342 Michigan Ave., Inkster

Iacobell, Peter H.....19300 Van Dyke, Detroit 34
Ice, G. T.....18060 Conant St., Detroit 34
Igna, Eli J.....2799 W. Grand Blvd., Detroit
Irvin, Earle Albert.....
Ford Motor Co., 3000 Schaefer Road, Dearborn
Irwin, William A.....Providence Hospital, Detroit 8
Isaacson, Arthur.....2921 E. Davison Ave., Detroit 12
Isaacson, H. E.....15101 W. Seven Mile Road, Detroit
Iseri, Lloyd T.....Wayne University, Detroit
Israel, Barney B.....1424 Maccabees Bldg., Detroit
Israel, Joseph G.....870 Maccabees Bldg., Detroit 2
Israel, Kenneth.....722 Maccabees Bldg., Detroit 2
Iwata, Herbert.....428 McKerchey Bldg., Detroit
Izner, S. M.....17500 Schaefer, Detroit 35

Jacobs, Arnold.....16930 Livernois, Detroit
Jacobson, Samuel D.....2435 Oakman Blvd., Detroit 4
Jaeger, Grove A.....1802 E. Grand Blvd., Detroit 11
Jaekel, C. N.....1086 E. Grand Blvd., Detroit 7
Jaffar, Donald J.....734 Maccabees Bldg., Detroit 2
Jaffe, J. L.....7465 Harper, Detroit 13
Jaffe, Jacob.....501 Fox Theater Bldg., Detroit 1
Jaffe, Louis.....1605 David Broderick Tower, Detroit 26
Jahsman, William E.....Henry Ford Hospital, Detroit 2
Jamieson, Thomas J.....1310 Warwick, Lincoln Park
Janicki, Natalia J.....Wayne Co. Gen. Hospital, Eloise
Jarre, Hans A.....Grace Hospital, Detroit
Jarsen, Frank J.....817 Beechmont, Dearborn
Jarvis, Harold F.....14110 Gratiot Ave., Detroit
Jasion, Lawrence J.....11945 Payton Ave., Detroit
Jaynes, Richard V.....25296 Fenkell, Detroit
Jeffries, Benjamin.....1010 Harvard, Detroit 30
Jend, W. J. (L).....3598 Mitchell, Detroit 7
Jenkins, Elwood A.....514 Kales Bldg., Detroit
Jennings, Charles G.....14827 E. Jefferson, Detroit 15
Jennings, Elmer R.....Alexander Blain Hospital, Detroit
Jensen, E. H.....Wayne County General Hosp., Eloise
Jensen, V. W.....8230 Littlefield, Detroit 28
Jentgen, Chas. J.....22101 Moross Road, Detroit 24
Jeremias, Robert C.....13300 Livernois, Detroit 4
Jewell, F. C.....7220 Gratiot Ave., Detroit 13
Jocz, M. W.....
Chrysler Corp., 341 Massachusetts Ave., Detroit 31
Jodar, E. O.....15760 Mack, Detroit 24
John, Hubert R.....650 Maccabees Bldg., Detroit 2
Johnson, A. S.....Harper Hospital, Detroit 1
Johnson, Homer L.....Henry Ford Hospital, Detroit 2
Johnson, John F. (M).....
1901 S. Monticello, 3560th Med. Group, Webb AFB, Big Spring, Texas
Johnson, Ralph A.....7815 E. Jefferson, Detroit 14
Johnson, Thomas D.....20526 Grand River, Detroit
Johnson, Vernon P.....10445 Kercheval, Detroit 14
Johnson, Vincent C.....10 Peterboro, Detroit
Johnson, W. H. M.....7159 Michigan, Detroit 10
Johnston, Charles G.....1512 St. Antoine, Detroit
Johnston, E. V.....3919 John R, Detroit
Johnston, Joseph A.....Henry Ford Hospital, Detroit
Johnston, J. L. (A)....1950 W. McNichols Rd., Detroit 3
Johnston, William E.....1071 Fisher Bldg., Detroit 21
Johnstone, B. I.....555 Fisher Bldg., Detroit 2
Joinville, E. V.....1202 Mutual Bldg., Detroit 26
Jones, Adrian R.....15309 Mack Ave., Detroit 24
Jones, E. M. (A).....Route 1, Clinton, Missouri
Jones, L. F.....1800 Tuxedo Ave., Detroit 6
Jones, Roy D.....15720 James Couzens Hwy., Detroit 21
Jones, W. J.....2514 Biddle, Wyandotte
Jordan, Prescott.....1209 Kales Bldg., Detroit
Jordan, R. Gerald.....7759 Harper Ave., Detroit 13
Joyce, Stanley J.....1078 Fisher Bldg., Detroit 2
Juliar, Benjamin....4100 W. McNichols Road, Detroit 21
Jury, Donald B.....18800 Woodward, Detroit 3

Kalayjian, Bernard S.....Woman's Hospital, Detroit 1
Kalder, Ned Block.....6071 W. Outer Drive, Detroit 35
Kalichman, Nathan.....532 Maccabees Bldg., Detroit 2
Kallet, Herbert I.....944 Maccabees Bldg., Detroit 2
Kallet, Maerit.....944 Maccabees Bldg., Detroit 2
Kallman, David.....5725 Cass, Detroit 2
Kallman, Leo.....5725 Cass, Detroit 2
Kallman, R. Robert.....
2632 Woodward Ave., Room 202, Detroit
Kamin, Louis E.....4642 Second Blvd., Detroit
Kaminski, Zeno L.....3504 24th St., Detroit 8
Kamperman, George A. (L).....
1807 David Whitney Bldg., Detroit 26
Kanter, Herman.....13127 West 7 Mile Road, Detroit 21
Kapetansky, A. J.....1728 Clairmont, Detroit 6
Kapetansky, N. J.....4790 W. Fort St., Detroit 9
Kaplita, Walter A.....2901 Holbrook, Detroit 12
Karch, Saul.....26114 W. Six Mile Road, Detroit 6
Kasabach, Harry Y.....1067 Fisher Bldg., Detroit
Kasabach, V. Y.....523 Book Tower Bldg., Detroit 26
Kashtan, H. A.....Harper Hospital, Detroit 1
Kasper, Joseph A.....Bon Secour Hospital, Grosse Pte. 30
Kaspor, Albert J.....16715 Harper Ave., Detroit
Kass, Arnold.....1316 David Stott Bldg., Detroit
Katz, Lawrence.....987 E. Jefferson, Detroit 7
Katzman, I. S.....412 Fox Theater Bldg., Detroit 1
Kaufman, J. M.....1113 David Whitney Bldg., Detroit 8
Kaump, Donald H.....Providence Hospital, Detroit 8
Kauppinen, J. A.....15400 Plymouth Road, Detroit 27
Kawecki, Lucian....10734 Hart Ave., Huntington Woods
Kazdan, Louis L.....1027 David Stott Bldg., Detroit 26
Kazdan, Morris.....4619 Allen, Allen Park
Keane, William E. (E).....
1007 Harvard Rd., Grosse Pointe 30
Keating, Thomas F. (L)....20936 Grand River, Detroit
Kehoe, Henry J.....15252 Gratiot, Detroit 5
Keim, H. L.....1110 David Broderick Tower, Detroit 26
Keith, Kelly.....106 West Davison, Detroit 3
Kelly, Edward W.....156 Harmon, Detroit 2
Kelley, Frank James.....3919 John R St., Detroit
Kelmenson, Victor A.....7356 12th St., Detroit 6
Kelson, Malcolm J.....1045 Harvard, Grosse Pointe 30
Kemler, Walter J.....4045 W. Jefferson, Ecorse 18
Kennary, James M.....4900 Cadieux Road, Detroit
Kennedy, Chas. S.....10 Peterboro, Detroit 1
Kennedy, Donald J.....2730 E. Jefferson, Detroit 7
Kennedy, R. B.....3481 Seminole, Detroit 14
Kenney, L. J.....Henry Ford Hospital, Detroit 2
Kenning, John C. (A).....50 E. LaMar, Phoenix, Ariz.
Kennison, Warren S.....1103 Kales Bldg., Detroit
Kernkamp, Ralph F.....1204 Broderick Tower, Detroit
Kernick, M. O.....13700 Woodward Ave., Detroit
Kernodle, J. B.....Grandview, Mo.
Kerzman, Joseph H.....850 Maccabees Bldg., Detroit 2
Keshishian, Sarkis K.....13544 Woodward Ave., Detroit 3
Keyes, Eugene Charles.....4840 Maple St., Dearborn
Keyes, John W.....Henry Ford Hospital, Detroit
Killins, C. G.....8100 E. Jefferson, Detroit
Kimberlin, Kenneth K., Jr.....16101 Harper, Detroit 24
King, Edward D.....5455 W. Vernor Highway, Detroit 9
King, Melbourne J...5455 W. Vernor Highway, Detroit 9
Kingsley, J. W. Jr.....2201 E. Jefferson, Detroit 7
Kingswood, Roy C.....90 E. Warren Ave., Detroit 1
Kinsley, George.....909 Kales Bldg., Detroit
Kirtland, William B.....2201 E. Jefferson, Detroit 7
Kitzmiller, John L.....15819 Wyoming Ave., Detroit 21
Klein, Alfred A.....23700 Van Dyke, Van Dyke
Klein, Howard A.....1838 David Whitney Bldg., Detroit
Klein, Sander P.....1312 David Broderick Tower, Detroit
Klein, William.....1795 Oakman, Detroit 38
Kleinman, Shmarya.....2909 W. Grand Blvd., Detroit
Kliger, David.....7756 Southfield, Detroit 10
Klosowski, Joseph.....8222 E. Outer Drive, Detroit
Knabe, G. W., Jr. (A).....Henry Ford Hospital, Detroit
Knaggs, Earl J.....3164 Biddle, Wyandotte
Knaggs, Charles W. (L).....12244 Gratiot, Detroit 5

Knapp, Byron S.....10909 W. Jefferson, River Rouge 18
Knapp, Floyd B.....16565 Birwood, Detroit 21
Knapp, W. L.....106 West Davison, Highland Park 3
Knight, E. M., Jr.....Harper Hospital, Detroit
Knighton, Robert S.....Henry Ford Hospital, Detroit 2
Knobloch, Edmund J.....5933 Chene, Detroit 11
Knoch, Hubert S.....14149 E. Jefferson, Detroit 15
Knox, Ross M.....9 Salliotte, Ecorse
Kobernick, S. D.....6767 W. Outerdrive, Detroit 35
Koebel, R. H.....14504 Mack Ave., Detroit 24
Koerber, Edward J.....4876 Lakeview Ave., Detroit 13
Kogut, C. S.....10627 Puritan, Detroit
Kokowicz, Raymond J.....
1056 Maccabees Bldg., Detroit 2
Kolasa, W. B.....1910 E. Grand Blvd., Detroit 11
Kopel, Joseph O.....10 Peterboro, Detroit 11
Koran, V. L.....972 Maccabees Bldg., Detroit 2
Koren, Louis.....1214 Griswold St., Rm. 610, Detroit 26
Korum, L. W.....18585 E. Warren, Detroit
Koschnitzke, Herman K.....2900 S. Fort, Detroit
Kossayda, Adam W.....5605 Michigan Ave., Detroit 10
Koster, Koert.....17725 Manderson Road, Detroit 3
Kovan, D. D.....16965 Hamilton, Highland Park
Koven, Abraham.....614 Professional Bldg., Detroit 1
Kozlinski, Anthony E.....2195 E. Grand Blvd., Detroit 11
Krabbenhoft, Kenneth.....Harper Hospital, Detroit 1
Kraft, Raymond B.....9300 Mack Ave., Detroit 14
Kraft, Ruth M.....972 Fisher Bldg., Detroit 2
Krakauer, Bernard.....767 Fisher Bldg., Detroit 2
Krass, Edward W.....11088 Gratiot Ave., Detroit 5
Kraus, John J.....16840 E. Warren, Detroit
Krebs, William T.....16419 E. Warren, Detroit 24
Kreinbring, George E.....4229 Mt. Elliott, Detroit 14
Kretzschmar, John C.....535 E. Grand Blvd., Detroit 7
Krevsky, David A.....2015 Fort St., Lincoln Park 25
Krieg, Earl G. M...1842 David Whitney Bldg., Detroit 26
Krieger, Harley L.....11390 Strathmore, Detroit 27
Kritchman, M. J.....
2314 David Broderick Tower, Detroit 26
Kroha, Lawrence A.....15124 Kercheval, Detroit 30
Kroll, H. V.....7815 E. Jefferson, Detroit 14
Krynicki, Francis X.....
15300 W. McNichols Road, Detroit 35
Kubanek, Joseph L.....23134 Myrtle St., Dearborn
Kucmierz, Francis S.....12181 Joseph Campau, Detroit 12
Kuhn, Albert Arthur.....90 E. Warren, Detroit 1
Kuhn, Richard F.....1700 Junction, Detroit 9
Kulaski, Chester H.....9309 Jos. Campau, Detroit 12
Kullman, Harold J. F.....Veterans Adm. Hosp., Dearborn
Kurcz, Joseph A.....7433 Michigan, Detroit 10
Kurnetz, Ruben.....18200 Wyoming, Detroit 21
Kurtz, Harry C.....
833 Barrington Road, Grosse Pointe Park 30
Kurtz, Leonard D.....2208 Broderick Tower, Detroit
Kutsche, John D.....2057 W. Jefferson, Trenton
Kwasiborski, Stanley A.....2300 Oak St., Wyandotte
Kyprie, H. M.....414 Kales Bldg., Detroit

LaBerge, James M.....114 Maple St., Wyandotte
LaBine, Alfred C.....8-259 General Motors Bldg., Detroit
La Ferte, Alfred D.....
1401 David Whitney Bldg., Detroit 26
LaHood, M. J.....17555 James Couzens, Detroit 35
Lake, R. C.....10700 Balbour Road, Detroit 24
Lakoff, Charles....10234 W. Seven Mile Road, Detroit 21
Lam, Conrad R.....Henry Ford Hospital, Detroit 2
Lamberson, Frank A.....19001 Grand River, Detroit 23
Lammy, James V.....644 Maccabees Bldg., Detroit 2
Lampman, H. H.....675 Fisher Bldg., Detroit 2
Landers, Maurice B. Sr.....
950 David Whitney Bldg., Detroit 26
Lang, E. F.....Harper Hospital, Detroit
Lang, Leonard W.....17400 Schaefer, Detroit 21
Lange, William A.....3919 John R, Detroit
Langin, J. L.....Detroit Memorial Hospital, Detroit 26
Laning, George M.....
1217 David Whitney Bldg., Detroit 26
Lansky, Mandell.....14427 Mack Ave., Detroit
Lapham, F. E.....12583 Livernois, Detroit 4
Large, A. M.....10 Peterboro, Room 210, Detroit
Larkin, D. A.....27309 Plymouth Road, Detroit 28
Larned, Richard I.....14182 Gratiot, Detroit
Larson, C. J.....12820 Ward, Wyandotte
Larson, Francine.....12820 Ward, Wyandotte
Larsson, Bror H. (L).....
Doctors Bldg., Suite 401, 3919 John R St., Detroit
Lasichak, Andrew G.....908 Kales Bldg., Detroit
Lasley, James William....1026 Maccabees Bldg., Detroit 2
Lathrop, Philip L.....415 Book Bldg., Detroit 26
Latteier, Karl K.....10 Peterboro, Detroit 1
Lauppe, Edward H.....
1650 David Whitney Bldg., Detroit 26
Lauppe, Frederick A.....
1801 David Whitney Bldg., Detroit 26
Laupus, W. E.....Lynn Hospital, Detroit 17
Laurisin, Eugene.....5290 W. Chicago, Detroit
Lawhead, Nixon R.....7348 Kercheval, Detroit 14
Lawrence, L. F.....17300 Schaefer, Detroit 35
Lawson, John W.....18456 Grand River Ave., Detroit 23
Lazar, Morton R.....7401 Third Ave., Detroit 2
Leach, David.....865 Fisher Bldg., Detroit 2
Leach, R. B.....1401 Rivard, Detroit 7
Leacock, R. C.....10619 E. Jefferson, Detroit
Leader, Luther R...1129 David Whitney Bldg., Detroit 26
Leaver, L. Ross.....757 Lakewood, Detroit 15
Lebamoff, A. T. (M).....6586 Allen, Allen Park
Lechner, M. S.....2734 Ewald Circle, Detroit 38
Leckie, George C...1355 David Whitney Bldg., Detroit 26
Lecklider, A. F.....Fisher Body Division, Piquette and St. Antoine, Detroit
Lee, Harry E.....13616 Gratiot Avenue, Detroit 5
Le Gallee, George M.....
18520 W. Seven Mile Road, Detroit 27
Leibinger, Henry R.....
511 Barrington Road, Grosse Pointe
Leipsitz, Louis S.....3566 Cass, Detroit 1
Leiser, Rudolf.....230 South Martha, Dearborn 7
Leiter, Forrest C.....22375 W. Garrison, Dearborn
Leithauser, D. J.....14540 E. Warren, Detroit
Leland, Sol.....6563 Grand River, Detroit 8
Lemley, Clark F.....553 Fisher Bldg, Detroit 2
Lemmer, J. A. Jr.....9300 Mack Avenue, Detroit
Lemmon, Charles E.....
1337 David Whitney Bldg, Detroit 26
Lemon, Bruce K.....1202 Maccabees Bldg., Detroit 21
Lentine, James J.....3485 Audubon, Detroit
Lenz, Willard R.....418 Moran Road, Grosse Pointe 30
Lepard, C. W.....1025 David Whitney Bldg, Detroit 26
Lepley, Fred O.....13302 Kercheval, Detroit 15
Lerman, S. E.....23700 Van Dyke, Van Dyke
Lerman, Samuel I.....4400 Livernois, Detroit
Lerner, L. H.....16901 W. McNichols Rd., Detroit 35
L'Esperance, Simon P. (R).....
Route 3, Woodslee, Ontario, Can.
Lessem, David.....19945 Prevost, Detroit 10
Leszynski, J. S.....517 Professional Bldg., Detroit 1
Letson, H. C.....Receiving Hospital, Detroit
Leucutia, Traian.....10 Peterboro, Detroit
Levagood, Floyd B.....14056 Artesian, Detroit
Levant, Arthur B.....14828 E. Warren, Detroit
Levenson, M. L.....2301 Calvert, Detroit 6
Levin, David M.....8819 Dexter Blvd., Detroit 6
Levin, Herbert G.....17300 Schaefer, Detroit
Levin, Michael M.....616 Maccabees Bldg., Detroit
Levin, Samuel J.....469 Fisher Bldg, Detroit 2
Levine, E. E.....Veterans Adm. Hospital, Dearborn
Levine, S. S.....8233 W. Chicago, Detroit
Levitt, Edward J.....840 Maccabees Bldg, Detroit 2
Levitt, Irving.....19214 Santa Barbara, Detroit
Levitt, Nathan.....607 Kales Bldg, Detroit
Levy, David B.....13003 Santa Clara, Detroit 35
Levy, Marvin B.....13906 Woodward, Detroit 3
Lewin, Harry..2457 Woodward Ave., Suite 702, Detroit 1
Lewis, Charles T.....5050 Joy Road, Detroit 4
Lewis, J. Hugh.....2956 Biddle, Wyandotte
Lewis, L. A.....2730 E. Jefferson, Detroit 7

Lewis, Wilfred John....404 Professional Bldg., Detroit 1
Libbrecht, Robert V.....6540 Park, Allen Park
Lichter, M. L.....2900 Oakwood, Melvindale 25
Lichtwardt, Harry E.....413 Professional Bldg., Detroit 7
Lichtwardt, Hartman A.....432 E. Hancock Ave., Detroit
Liddicoat, A. G.....20125 Fenkell, Detroit 23
Lieberman, B. L.....19212 Woodward Ave., Detroit
Lightbody James J.....
501 David Whitney Bldg., Detroit 26
Lignell, Rudolph W.....
16259 James Couzens Hwy., Detroit
Lilly, Charles J.....2950 Puritan Ave., Detroit 21
Linkner, Leonard S.....738 Maccabees Bldg., Detroit 2
Linn, Herman J.....23541 Hollander, Dearborn
Linton, James R.....3 Sumner Road, Cambridge 38, Mass.
Lipinski, Stanley L.....7540 Michigan Ave., Detroit 10
Lipkin, Ezra.....5715 Michigan Ave., Detroit 10
Lipnik, C. E.....31619 Plymouth, Livonia
Lipnik, Morris J...15101 W. Seven Mile Road, Detroit 35
Lipschutz, Louis S.....19750 Chesterfield Rd., Detroit 21
Lipson, C. T.....Receiving Hospital, Detroit 26
Lipson, Madeleine L.....7401 Third Ave., Detroit 2
Lipton, Raymond F.....10 Peterboro, Detroit 1
Litsky, Abraham D.....1183 E. Grand Blvd., Detroit 11
Little, James W.....Mt. Carmel Mercy Hosp., Detroit
Littlejohn, David....Wayne County Bd. of Health, Eloise
Livingood, Clarence.....Henry Ford Hospital, Detroit 2
Lockhart, E. C.....4724 Tireman, Detroit 4
Lockwood, Bruce C.723 David Whitney Bldg., Detroit 26
Lofstrom, James E.....1420 St. Antoine, Detroit 26
Long, Earle C.....2626 Rochester, Detroit 6
Long, John J.....12421 Monica, Detroit 4
Longo, Salvatore.....St. Mary's Hospital, Detroit
Longyear, Harold W.....3019 N. Woodward, Royal Oak
Lookanoff, V. A.....
Highland Park General Hosp., Detroit 3
Loranger, C. B.....20825 Mack, Detroit
Loranger, Guy L.....250 Rayson St., Northville
Lorber, J. H.....16558 Northlawn Ave., Detroit 21
Lorentzen, Edwin H.....11702 Grand River, Detroit 4
Love, W. Thomas.....231 E. Warren, Detroit 1
Lowe, Adolf W.....3338 W. Davison, Detroit
Lowe, Townsend G.....9430 Oakland, Detroit 11
Lowrie, William L., Jr.....Henry Ford Hospital, Detroit 2
Lowry, George L.....11601 E. Jefferson, Detroit 14
Lublin, Anna.....18412 Mack Ave., Detroit 24
Luce, Henry A. (E).....
629 David Whitney Bldg., Detroit 26
Lukas, John R.....19212 W. Warren, Detroit 28
Lumpkin, John G., Jr.....243 East Warren, Detroit
Lutz, Earl F.....13-204 General Motors Bldg., Detroit 2
Lyford, John III.....Henry Ford Hospital, Detroit 2
Lynch, John M. (M)..F. A. Surgeon (R) F. E. H. Unit,
U.S. Public Health Service, Bethesda 14, Md.
Lynn, David H.....2900 S. Fort St., Detroit
Lynn, Harvey D.....2900 South Fort St., Detroit 25
Lyons, James H.....4510 Lake Drive, Robbinsdale, Minn.
Lyons, William Harington....1012 Kales Bldg., Detroit 26
Lytle, Robert P.....411 Professional Bldg., Detroit 1

Maben, Hayward C., Jr.....9342 Oakland, Detroit 11
Mabley, J. Donald..1139 David Whitney Bldg, Detroit 26
MacArthur, R. A. (A).....35793 13 Mile Rd., Farmington
MacCracken, Frances L.....3752 Gladstone, Detroit 6
MacDougall, O. P.....13700 Woodward, Detroit
MacFarlane, Howard W.....
1105 David Whitney Bldg, Detroit 26
MacGregor, William W.....
6320 West Surrey-Foxcroft, Birmingham
Mack, Harold C.....955 Fisher Bldg, Detroit 2
MacKenzie, Earle D.....81 E. Kirby, Detroit
MacKenzie, Edward P.....12801 E. Jefferson, Detroit 14
MacKenzie, Frank M.....
641 David Whitney Bldg., Detroit 26
MacKenzie, John W...289 Rivard Blvd., Grosse Pointe 30
Mackersie, W. G.....18205 Roselawn, Detroit 21
MacMillan, Francis B.... .....
920 David Whitney Bldg., Detroit 26
MacMullen, Frank B. (R)....Box 393, Boca Raton, Fla.
MacPherson, K. C.....8100 E. Jefferson, Detroit 2
MacQueen, Malcolm D.....
1654 1st National Bk. Bldg., Detroit 26
Maczewski, John E.....9535 Jos. Campau, Detroit 12
Maddock, W. O.....
Wayne University College of Medicine, Detroit
Magnell, Ralph C.....8825 Puritan, Detroit
Maguire, Clarence E.....
536 David Whitney Bldg., Detroit 26
Mahlin, M. S.....Harper Hospital, Detroit 1
Mahoney, Hugh M.....214 David Whitney Bldg, Detroit
Maibauer, Frederick P.....2966 Biddle, Wyandotte
Maino, Linus J.....2501 W. Grand Blvd., Detroit 8
Mainwaring, R. L.....15705 Jonas, Allen Park
Maire, Edward D.....15224 E. Jefferson, Grosse Pointe
Mair, Harold U.....10 Peterboro, Detroit 1
Maitland, Ruth J.....Mich. Bell Telephone Co., Detroit
Majzoub, Ahmad J.....2900 S. Fort St., Detroit 25
Malachowski, B. T.....2501 W. Grand Blvd., Detroit 8
Malik, Edward A.....11302 Chalmers, Detroit 5
Malik, Nur M.....585 E. Grand Blvd., Detroit 7
Malina, Stephen.....1601 Kirkway Rd., RFD 3, Pontiac
Malone, Richard S.....8445 E. Jefferson, Detroit
Maloney, John A.....1338 Maccabees Bldg., Detroit 2
Maltzer, Joseph H.....950 E. State Fair, Detroit 3
Mamos, Photius.....275 W. Grand Blvd., Detroit 16
Mancuso, Vincent S.....962 E. Grand Blvd., Detroit 7
Mandiberg, Jack N.....12700 W. 7 Mile Rd., Detroit
Mann, Andrew D.....16715 Harper, Detroit 24
Manning, Morey H.....950 E. State Fair, Detroit
Manz, H. N.....1427 E. Jefferson, Detroit 7
Mapletoft, Kenneth E. (M).....
320 S. Washington, Neosho, Mo.
Marcotte, Oliver.....2890 W. Grand Blvd., Detroit 2
Margules, S. Z.....80 W. Warren, Detroit 1
Margulis, R. R.....Henry Ford Hospital, Detroit 2
Marinus, Carleton J.....
303 David Whitney Bldg., Detroit 26
Mark, Jerome.....903 Kales Bldg, Detroit 26
Markey, Alexander P.....13810 Michigan Ave., Dearborn
Markey, Frank R.....631 Selden, Detroit 1
Markoe, Rupert C. L.....4102 Brush St., Detroit 1
Marks, Ben.....902 Industrial Bk. Bldg., Detroit 26
Marks, Bert W.....8250 Lincoln Dr., Huntington Woods
Marks, Morris H.....8233 W. Chicago, Detroit 4
Marsh, Alton R.....1218 Maccabees Bldg., Detroit 2
Marshall, James R.....14528 E. Jefferson, Detroit 15
Martin, Elbert A...1151 David Whitney Bldg., Detroit 26
Martin, J. B., Jr.....449 E. Elizabeth, Detroit 1
Martin, L. R.....2000 Second Blvd., Detroit 26
Martin, Peter A.....17185 Muirland, Detroit 21
Martin, R. D. (M).....(No Address)
Martin, Wilbur C.....7440 W. Jefferson, Detroit 17
Martineau, P. C.....1151 Taylor Ave., Detroit
Martinez, Pedro O.....1439 Bagley, Detroit 16
Martmer, Edgar E.....10 Peterboro, Detroit
Marvel, H. R.....Henry Ford Hospital, Detroit 2
Marwil, T. B.....16965 Hamilton, Highland Park
Mason, P. W.....13311 E. Jefferson, Detroit 15
Mateer, John G.....Henry Ford Hospital, Detroit 2
Mattman, Paul E.....1422 Seyburn, Detroit 14
Matson, Theodore.....3919 John R, Detroit
Maun, Mark E.....1551 David Whitney Bldg., Detroit
Maxwell, J. Harvey.....2415 W. Grand Blvd., Detroit 2
May, Frederick T.....608 Kales Bldg., Detroit 26
Mayer, E. V.....16525 Woodward Ave., Detroit 3
Mayer, Willard D...El Conquistador Hotel, Tucson, Ariz.
Maynard, F. M.....6828 Park, Allen Park
McAlonan, William T.....10 Peterboro, Detroit 1
McAlpine, Gordon S.....658 Fisher Bldg., Detroit 2
McBroom, R. E.... .....10 Peterboro, Detroit 1
McCadie, J. H.... .....13700 Woodward Ave. Detroit 3
McCandless, Virginia....20390 Harper Road, Detroit 24
McCaughey, R. S.....Receiving Hospital, Detroit 26
McClaughry, R. I.....1401 Rivard, Detroit 7

McClellan, Robert J., Sr. (L)
906 Michigan Theater Bldg., Detroit 26
McClellan, Robert J., II
906-8 Michigan Theatre Bldg., Detroit
McCleland, Rachel.....18989 Evergreen, Detroit 19
McClendon, James J.....503 E. Warren Ave., Detroit 1
McClintock, J. J.....14255 Greenfield, Detroit 27
McClure, Robert W.
1306 David Whitney Bldg., Detroit 26
McClure, William R.....954 Fisher Bldg., Detroit 2
McColl, Charles W.....2826 Biddle, Wyandotte
McColl, Clarke M.....Henry Ford Hospital, Detroit 2
McColl, K. M.
20323 Mack Ave., Grosse Pointe Woods 36
McCollum, E. B.....761 David Whitney Bldg., Detroit 14
McCord, Carey P.
Univ. Hosp., 111 Maternity Bldg., Ann Arbor
McCormick, Colin C.....222 Shaefer Bldg., Dearborn
McCullough, Lester E.
521 David Whitney Bldg., Detroit 26
McDonald, Angus L.....13856 Gratiot Ave., Detroit 5
McDonald, A. W. (L).....15015 Ward, Detroit 27
McDonald, P. W.....1801 Vinewood, Wyandotte
McDonald, William G.....7301 Schaefer Hwy., Dearborn
McDowell, D. B.....Wayne Co. Gen. Hosp., Eloise
McEvitt, William G...1140 W. Boston Blvd., Detroit 2
McFadyen, Hugh A.....10 Peterboro, Detroit 1
McGarvah, A. W...15105 W. Seven Mile Rd., Detroit 35
McGhee, Richard S.
10015 W. Eight Mile Rd., Detroit 21
McGillicuddy, Walter E.....511 Kales Bldg., Detroit 26
McGinnis, Daniel H.....1025 E. Forest, Detroit 7
McGlaughlin, Nicholas D...2312 Biddle Ave., Wyandotte
McGough, Joseph M.
18716 Grand River Ave., Detroit 23
McGuire, J. F.....815 Kales Bldg., Detroit 26
McGuire, M. Ruth.....763 Fisher Bldg., Detroit 21
McIntosh, Robert.....6307 W. Fort Street, Detroit 9
McIntyre, W. B.....1533 David Whitney Bldg., Detroit
McKean, G. Thomas.
1515 David Whitney Bldg., Detroit 26
McKean, Richard M.
1515 David Whitney Bldg., Detroit 26
McKeever, George E.....13349 Michigan, Dearborn
McKenna, Charles J.....1130 E Grand Blvd., Detroit 11
McKinnon, John D.....106 W. Davison, Detroit 3
McKnight, Robert E.
10030 W. McNichols Road, Detroit 21
McLane, Harriet E.....4350 Oregon, Detroit
McLean, Don W.....1066 Fisher Bldg., Detroit 2
McLean, Harold G.....10 Peterboro, Detroit 1
McMorrow, Kathryn J.
17306 W. Seven Mile Road, Detroit
McPherson, R. J.....12626 Myers Road, Detroit 27
McQuiggan, Mark R.....1050 Fisher Bldg., Detroit 2
McRae, Donald H. (L)..275 W. Grand Blvd., Detroit 16

Meek, S. F.....13020 Kilbourne, Detroit
Mellen, Hyman S.....622 Maccabees Bldg., Detroit 2
Mellins, H. Z.....Sinai Hospital, Detroit
Melnik, Maxim (A)....19479 Burlington Drive, Detroit 3
Menagh, Frank R.....Henry Ford Hospital, Detroit 2
Mendelssohn, R. J.....14427 Mack, Detroit 24
Mendoza, Samuel.....4400 Livernois, Detroit 10
Merkel, Charles C.....85 Kercheval, Grosse Pointe, 30
Merrill, William O.....958 Fisher Bldg., Detroit 2
Merritt, Earl G.....10 Peterboro, Detroit 1
Mersky, Charlotte I. (A).
32215 Queensboro, Farmington
Metes, John S.....14917 Gratiot, Detroit 5
Metzger, Harry C...25504 Wareham, Huntington Woods
Meyer, Ruben.....18254 Livernois, Detroit 21
Meyers, Marjorie.....5320 John R. St., Detroit 2
Meyers, Maurice P.....7411 Third Ave., Detroit 2
Meyers, Sidney.....19635 Mack Ave., Detroit
Meyers, Solomon G.....1320 Maccabees Bldg., Detroit 2
Michael, Michael J.....703 Mutual Bldg., Detroit
Michels, Julius.....9424 Mack Ave., Detroit 14
Mihay, Benjamin (M).....Box 348, Fargo, N. D.
Mikesell, Wesley B., Jr...21124 Goddard Rd., Dearborn
Miley, H. H.....8710 W. Davison, Detroit 4
Millard, Glenn E.....2900 W. Grand Blvd., Detroit 2
Miller, Daniel H.....8011 W. Vernor Highway, Detroit 9
Miller, Elmer B.....10 Peterboro, Detroit 1
Miller, J. R.....511 Professional Bldg., Detroit 1
Miller, Karl L.....1101 David Whitney Bldg., Detroit
Miller, Myron H.
8120 W. McNichols Road, Detroit 21
Miller, M. M.....10514 E. Jefferson, Detroit 14
Miller, Thomas H.
1305 David Whitney Bldg., Detroit 26
Miller, William Ernest.....10 Peterboro, Detroit 1
Mills, Clinton C.
16190 James Couzens Highway, Detroit 21
Mills, Georgia V.
General Delivery, Elizabethtown, N. C.
Milton, Samuel B.
600 Palmerston Ave., River Rouge 18
Mimura, J. T.....1419 David Whitney Bldg., Detroit 26
Mintz, Edward I.....7401 Third Ave., Detroit 2
Mintz, Morris J.....16895 Livernois, Detroit 21
Miral, Solomon P.....4858 E. Davison, Detroit 12
Mishelevich, Sophie.....3008 W. Grand Blvd., Detroit 2
Miskinis, Martyna.....7615 W. Vernor, Detroit 9
Missavage, Edward, Jr. (M).
28th General Hospital, APO 219, c/o PM New York,
Mitchell, Augustus W. (M).
314 Visger Road, River Rouge
Mitchell, C. Leslie.....Henry Ford Hospital, Detroit 2
Mitchell, D. P.....7713 Oakland, Detroit 11
Mitchell, Gertrude F.....650 W. Bethune, Detroit 2
Mitchell, Ralston S.....243 E. Warren, Detroit
Moehlig, Robert C.....964 Fisher Bldg., Detroit 2
Mogill, George.....3150 Second Ave., Detroit 6
Moisides, V. P.....1205 Mutual Bldg., Detroit 26
Moll, Clarence D.....10 Peterboro, Detroit 1
Molnar, S. K.....4525 S. Telegraph, Dearborn
Molner, Joseph G.....334 Bates St., Detroit
Mond, Edward
1812 David Broderick Tower, Detroit 26
Monson, Robert C.....16404 E. Warren, Detroit 24
Montante, Joseph R.
14447 W. Seven Mile Road, Detroit 35
Montgomery, John C.
25622 Coolidge Hwy., Huntington Woods
Monto, Raymond.....Henry Ford Hospital, Detroit 2
Moore, J. W.
8507 W. Eight Mile Road, Detroit 21
Moore, W. R.....Harper Hospital, Detroit 1
Mopper, Coleman.
14633 E. Seven Mile Road, Detroit 5
Morand, Louis J.....641 David Whitney Bldg., Detroit 26
Morgan, Donald N.
1807 David Whitney Bldg., Detroit 26
Moriarty, George J.....770 Fisher Bldg., Detroit 2
Morin, J. B. (L).....14416 Beech Road, Detroit 23
Morita, Yoshikazu.....1401 Rivard, Detroit 7
Moritz, H. C.....1053 David Whitney Bldg., Detroit 26
Morley, A. R.....2301 23rd St., Wyandotte
Morley, Harold V.....773 Fisher Bldg., Detroit 2
Morley, James A.....10520 Plymouth Ave., Detroit 4
Moroun, S. J.....8045 E. Jefferson, Detroit 14
Morris, Harold L.....1069 Fisher Bldg., Detroit 2
Morse, Plinn F.....Harper Hospital, Detroit 1
Morton, David G.....16901 W. McNichols, Detroit 21
Morton, John B. E. (E).....90 E. Warren, Detroit 1
Mosee, W. Jones,.....5205 Hastings, Detroit 11
Mosen, Max M.....8015 Harper, Detroit 13
Moss, Ervin B.....1907 Pingree, Detroit 6
Moss, Nathan H.....2847 Trumbull, Detroit 16
Moss, Selma S.....18254 Livernois, Detroit 21
Mossman, J. D.....1052 Maccabees Bldg., Detroit 21
Mott, Carlin P.....2395 W. Grand Blvd., Detroit 8
Moulton, C. W. (A).....106 N. Silver St., Olney, Ill.
Mullen, J. R.....7615 W. Vernor Hwy., Detroit

Munson, Henry T. E.....14344 E. Jefferson, Detroit
Murphy, D. J.....10 Peterboro, Detroit 1
Murphy, John M.....710 David Whitney Bldg., Detroit
Murphy, Robert T.....113 Martin Place, Detroit 1
Murphy, Scipio G.....603 E. Forest, Detroit 1
Murphy, W. M.....10500 E. Warren, Detroit 14
Murray, G. M.....8045 E. Jefferson, Detroit
Murray, Thomas H.....19345 W. McNichols, Detroit 19
Murray, William A.....11841 Ohio Ave., Detroit 4
Muske, Paul H.....5605 Michigan Ave., Detroit 10
Musselman, Merle M...Univ. of Nebraska, Omaha, Nebr.
Musson, E. K.....Wayne County Health Dept., Eloise
Myers, D. W.....224 Professional Bldg., Detroit 1
Myers, Gordon B.....1512 St. Antoine, Detroit

Nagle, John W.....100 Oak St., Wyandotte
Nahigian, Russell .....
15801 W. McNichols Road, Detroit 35
Nahoun, Antoine.....2201 E. Jefferson, Detroit
Naud, Henry J.....18456 Grand River Ave., Detroit 23
Naylor, A. H.....10033 Tireman, Dearborn
Neeb, Walter G.....16840 E. Warren, Detroit
Nehra, John N.....18514 Mack Ave., Detroit 36
Neill, Edwin J.....8045 E. Jefferson, Detroit 14
Nelson, Darwin M.....153 W. Grand Blvd., Detroit 16
Nelson, Harry M.....1067 Fisher Bldg., Detroit 2
Nelson, Victor E.....7345 Fenkell, Detroit
Newbarr, Arthur A.....1060 Fisher Bldg., Detroit 21
Newman, Ernest.....17371 Evergreen, Detroit 19
Newman, M. K.....16861 Wyoming Ave., Detroit
Nickels, Albert W.....471 Fisher Bldg., Detroit 2
Nickerson, I. Dean.....6245 Golfview Dr., Birmingham
Nielsen, Aage E.....10 Peterboro, Detroit 1
Nigro, Norman D.....10 Peterboro, Detroit 1
Nill, John B.....6030 Grandy, Detroit 11
Nill, William F.....6030 Grandy, Detroit 11
Noble, William C.....4045 W. Jefferson, Ecorse 18
Nolan, Bernard E.....932 Maccabees Bldg., Detroit 2
Nolte, E. C. (M)....1716 Bu Don Ct., Columbia, S. C.
Nolting, Wilfred S. H.....15850 E. Warren, Detroit 24
Norconk, A. A.....859 Fisher Bldg., Detroit 2
Norcott, Edith G. S.....16350 Mack Ave., Detroit 24
Norris, Edgar H.....607 Lakepointe Grosse Pointe 30
Northcross, David C. (M).....668 Winder, Detroit 1
Norton, A. B.....1076 Maccabees Bldg., Detroit
Norton, Charles S.....3503 14th St., Detroit 8
Noshay, William C.....Henry Ford Hospital, Detroit 2
Novack, Richard.....4741 Spokane, Detroit 4
Novy, R. L.....858 Fisher Bldg., Detroit 2
Nowicki, Joseph A.....3841 Junction, Detroit 10
Nunn, James W.....106 W. Davison, Detroit 3

O'Brien, E. J.....307 David Whitney Bldg., Detroit 26
O'Brien, G. M.....2501 W. Grand Blvd., Detroit 8
Obushkevich, L. S.....10149 Michigan Ave., Dearborn
O'Connor, Katheryn L.....
14301 Grand River Ave., Detroit 27
O'Donnell, Charles H.....10 Peterboro, Rm. 504, Detroit
O'Donnell, David H. (E)..2501 W. Grand Blvd., Detroit
O'Donnell, Dayton H., Jr...2501 W. Grand Blvd., Detroit
Oetting, E. M.....8045 E. Jefferson, Detroit 14
Ohmart, Galen.....8721 E. Jefferson, Detroit 14
Ohrt, Harold F.....285 E. Grand Blvd., Detroit 7
Okun, Milton H.....3261 Sherbourne Road, Detroit 21
Olechowski, Leo, Cmdr. (M), MC USN.....
U.S. Naval Hosp., Newport, Rhode Island
Olen, Alex.....13100 Harper, Detroit 13
O'Linn, Francis P.....1055 Fisher Bldg., Detroit 2
Olmsted, George S...18530 Grand River Ave., Detroit 23
Olmsted, William R. (L).....
219 Broadway Mkt. Bldg., Detroit 26
Olson, James A.....28 W. Adams—Suite 911, Detroit 26
Oman, Cyrus F.....12608 Wyoming Ave., Detroit 4
Onoda, B. Y.....14193 Winthrop, Detroit 27
Oppenheim, J. M.....506 Kales Bldg., Detroit 6
Orecklin, Leo.....914 Maccabees Bldg., Detroit 2
Organ, Fred W.....10304 Woodward Ave., Detroit 2
Ormond, John K. (A)..1169 N. Woodward, Birmingham
Ornstein, Charles.....19504 Kelly Road, Detroit 24
O'Rourke, Paul V.....
307 David Whitney Bldg., Detroit 26
O'Rourke, R. M.....7384 Twelfth St., Detroit 6
Ortiz, Augusto (M).....9545 Sanilac, Detroit 24
Osius, Eugene A.....
901 David Whitney Bldg., Detroit 26
O'Sullivan, Girardin.....18129 Sunnybrook, Birmingham
Otlewski, E. A.....10030 W. McNichols Road, Detroit 21
Ott, Harold A.....3019 N. Woodward Ave., Royal Oak
Ottaway, John P.....
1337 David Whitney Bldg., Detroit 26
Owen, Clarence I.....4160 John R, Detroit 1
Owen, James A.....67 E. Forest, Detroit 1

Palmer, Alice E.....3919 John R, Detroit 1
Palmer, M. R.....7624 Dexter Blvd., Detroit 3
Palmisano, I. J.....25447 Plymouth Road, Detroit 28
Pangburn, L. E.....7 Avalon, Detroit
Panic, Stephen M.....
1001 W. Seven Mile Road, Detroit 12
Parcells, Frank H.....1014 Buckingham Road, Detroit
Paris, D. A.....Alexander Blain Hosp., Detroit 7
Park, C. W.....3150 Second Blvd., Detroit 1
Parker, Benjamin R.....
17306 W. Seven Mile Road, Detroit 19
Parker, Walter R. (E).....
1025 David Whitney Bldg., Detroit
Parnell, John W.....
1297 Lochmoor Blvd., Grosse Pointe Woods 30
Parr, Robert W...8-265 General Motors Bldg., Detroit 2
Parsons, John P.....
808 Grand Marais, Grosse Pointe Park 30
Past, W. L. (A).....Henry Ford Hospital, Detroit
Pasternacki, N. T.....6203 Chene, Detroit 11
Paterson, Walter G. (L).....471 Fisher Bldg., Detroit 3
Pawlowski, Jerome I.....2009 East Grand, Detroit
Payne, Eugene .....
P. O. Box 118, Roosevelt Park Annex, Detroit 32
Paysner, Harry A.....13700 Woodward Ave., Detroit 3
Peabody, Charles W.....474 Fisher Bldg., Detroit
Pearce, A. J. (M).....
1235 N. Quinn St., Arlington, Va.
Pearlman, Jack (M).....1017 Westbrook, Rome, N. Y.
Pearman, C. L. R.....1509 Kales Bldg., Detroit
Pearse, Harry A.....852 Fisher Bldg., Detroit 2
Pedersen, Herbert E.....1209 Kales Bldg., Detroit
Peggs, George F.....5419 Livernois, Detroit 10
Penberthy, G. C.....
1515 David Whitney Bldg., Detroit 26
Pendy, George V.....
1808 David Broderick Tower, Detroit
Pendy, John M.....1401 David Whitney Bldg., Detroit 26
Pensler, Leslie.....8844 Joy Road, Detroit
Pensler, Meyer M.....8844 Joy Road, Detroit
Pequegnot, Charles F. (L).....
6283 W. Outer Drive, Detroit 21
Percy, D. F.....Mt. Carmel Mercy Hosp., Detroit
Perdue, Grace M.....762-63 Fisher Bldg., Detroit 2
Perkin, Frank S.....970 Fisher Bldg., Detroit 2
Perlis, H. L.....1036 Maccabees Bldg., Detroit 2
Peterman, Earl A.....13700 Woodward, Detroit 3
Peters, Wm. R.....12400 E. Seven Mile Road, Detroit 5
Peterson, R. A.....17581 Prest, Detroit 35
Petix, Samuel C.....19207 Schaefer, Detroit 21
Petoskey, Edward A.....6004 West Fort, Detroit 9
Petty, Thomas A. (M).....
1204 Yorkshire, Grosse Pointe Park
Pevin, Pauline.....18709 Meyers Road, Detroit 21
Peven, Philip S.....18709 Meyers Road, Detroit 21
Pfeiffer, Rudolph L. (L).....
469 E. Grand Blvd., Detroit 7
Phillips, B. E.....7600 John R St., Detroit 2
Phillipson, Chester.....7411 Third Ave., Detroit 2
Picard, J. D.....13349 Michigan Ave., Dearborn
Piccone, Louisa.....10605 W. Warren, East Dearborn
Pichette, J. Walton.....15146 Michigan Ave..Dearborn
Pickard, Orlando W.....952 Fisher Bldg., Detroit 2
Pierson, Max J.....1030 Maccabees Bldg., Detroit 2

Pietraszewski, A. W.....10338 Jos. Campau, Detroit 12
Pinckard, Karl G.....932 Mason St., Dearborn
Pink, Rose M.....11413 Jos. Campau, Detroit
Pinney, L. J.....28 W. Adams Ave., Detroit
Pino, Ralph H.....208 David Whitney Bldg., Detroit 26
Piper, Ralph R.....1530 McKinstry Ave. Detroit 7
Pittman, J. E.....1613 David Whitney Bldg., Detroit 26
Platz, Carol K.....11368 Kelly Road, Detroit
Pliskow, Harold..10730 W. Seven Mile Road, Detroit 21
Podolsky, Harold M.....2785 S. Fort, Detroit 25
Poirier, Ralph A.....1405 Mutual Bldg., Detroit 26
Polentz, Charles P.....10 Peterboro, Detroit 1
Polk, John E. (M).....8742 Twelth St., Detroit 6
Pollack, John J.....18200 Wyoming Ave., Detroit 21
Ponka, Joseph L.....Henry Ford Hospital, Detroit 2
Pool, Walter D.....20901 Moross Road. Detroit
Poos, Edgar E.....554 Fisher Bldg., Detroit 2
Porretta, Anthony C.....11146 Gratiot, Detroit 5
Porretta, F. S.....1076 Maccabees Bldg., Detroit 2
Porter, F. G.....14001 Greenfield, Detroit 27
Porter, Howard J. (R).....
36911 Goddard Road, Romulus
Portnoy, Harry.....4253 Leslie, Detroit
Posch, J. L.....1410 Kales Bldg., Detroit
Posner, Irving....12901 W. Seven Mile Road, Detroit 21
Pratt, Jean P. (L)....18910 Fairway Drive, Detroit 21
Pratt, Lawrence A.....
Doctors Bldg., Suite 800, 3919 John R, Detroit
Prendergast, John J.....4436 Soles Road, Dryden
Prescod, H. J.....Wayne County General Hosp., Eloise
Preston, Ruth E.....460 Fisher Bldg., Detroit 2
Price, Alvin Edwin.....
313 David Whitney Bldg., Detroit
Price, A. Hazen.....62 W. Kirby, Detroit 2
Priest, R. J.....Henry Ford Hospital, Detroit
Prince, A. E.....18060 Conant, Detroit 34
Prisbe, Edward J.....16603 Plymouth Road, Detroit 27
Priver, Julien .....6741 W. Outer Drive, Detroit 35
Procailo, A. B.....29627 Ford Road, Garden City
Proctor, Bruce....1419 David Whitney Bldg., Detroit 26
Proud, Robert H.....26151 Huron River Dr., Flat Rock
Prust, Frank W.....Harper Hospital, Detroit 1
Pugh, Howard C.....
1165 David Whitney Bldg., Detroit 26
Pugliesi, Benedetto.....9489 E. Outer Drive, Detroit 5
Purcell, Frank H.....
1808 David Broderick Tower, Detroit 26
Purves, William H. L.....18501 Snowden, Detroit

Quigley, Eugene H.....22340 Michigan, Dearborn
Quigley, William.....742 Maccabees Bldg., Detroit
Quinn, Edward L.....Henry Ford Hospital, Detroit 2

Rabinovitch, Bella.....4063 Waverly, Apt. 106, Detroit
Rahm, Lambert P.....14411 E. Jefferson, Detroit 19
Raiford, F. P.....1308 Broadway, Detroit 26
Raiford, Frank P., Jr.....681 E. Vernor Hwy., Detroit 1
Randall, David S.....7815 E. Jefferson, Detroit
Raskin, Herbert A.....23861 Seneca, Oak Park 37
Raskin, Morris.....987 E. Jefferson, Detroit
Rastello, Peter B.....6307 W. Fort St., Detroit 9
Ratigan, Carl S.....22276 Garrison, Dearborn
Rau, Frederick W.....113 Martin Place, Detroit
Ray, K. J. (M).....2336 Van Alstyne Blvd. Wyandotte
Raynor, Harold F.....13700 Woodward Ave., Detroit 3
Rebuck, John W.....Henry Ford Hospital, Detroit
Redding, Lowell G.....1336 Southfield, Lincoln Park, 25
Reder, Ben.....20731 Evergreen, Detroit 19
Redfern, William E.....Henry Ford Hospital, Detroit 2
Reed, E. H. (A).....
1033½ Cadieux Road, Grosse Pointe Park 30
Reed, H. Walter.....8150 Grand River Ave., Detroit 4
Reed, Ivor E.....305 David Whitney Bldg., Detroit 26
Reed, Joseph O., Jr.....434 St. Clair, Grosse Pointe 30
Reed, Howard C.....15700 Mack Ave., Detroit 24
Riechling, R. J. (A).....
18514 Mack, Grosse Pointe Farms 30
Reid, John Gilbert.....
1337 David Whitney Bldg., Detroit 26
Reid, Wesley G.....974 Fisher Bldg., Detroit 2
Reiff, Morris V.....10241 Joy Road, Detroit
Reinbolt, Charles A. (L).....
33570 Quaker Valley Road, Farmington
Reinsh, Ernest R.....18674 Muirland Ave., Detroit
Reisman, Nathan J.....1122 Maccabees Bldg., Detroit 2
Reisman, S. G..... .....1078 Maccabees Bldg. Detroit 2
Reive, David L.....24401 Plymouth, Detroit 28
Rennell, Leo P.....2567 West Grand Blvd., Detroit 8
Renton, George W.....1530 Seward, Apt. 209, Detroit
Rentenbach, R. F...314 David Whitney Bldg., Detroit 26
Reyner, C. E.....515 Professional Bldg., Detroit 1
Reveno, William S.....958 Fisher Bldg., Detroit 2
Reynolds, Lawrence.....10 Peterboro, Detroit 1
Reynolds, R. P.....858 Fisher Bldg., Detroit 2
Rezanka, H. J.....
952 Westchester Road, Grosse Pointe 30
Rhoades, Francis P.....970 Maccabees Bldg., Detroit 2
Rice, Harold B.....10 Peterboro, Detroit 1
Rice, Meshel.....533 Coats Road, Oxford
Richardson, Allan L. (R).....
Naubinway, Mackinaw County
Richardson, R. P.....3714 Monroe Ave., Wayne
Rick, Paul J.....4227 Mt. Elliott, Detroit 7
Ridge, Ralph W.....100 Oak St., Wyandotte
Rieckoff, George G.....
14905 E. Jefferson Ave., Detroit 15
Rieden, J. A.....2567 W. Grand Blvd., Detroit 8
Rieg, John F.....5695 W. Vernor Highway, Detroit 9
Rieger, John B.....1265 David Whitney Bldg., Detroit 26
Rieger, Mary H.....746 Pallister, Detroit
Riethmiller, Robert F. (M) .....
623 Pemberton Road, Detroit 30
Rinkel, Robert W.....6586 Allen Road, Allen Park
Riseborough, E. C.....90 E. Warren, Detroit 1
Ritter, George.....15801 W. McNichols, Detroit 35
Robb, Edward L.....17380 Livernois, Detroit
Robb, Herbert F.....381 S. Main St., Belleville
Robb, J. Milton....633 David Whitney Bldg., Detroit 26
Roberts, Arthur J.....1310 Warwick, Lincoln Park
Robins, Samuel C.....
18963 Jas. Couzens Highway, Detroit 21
Robinson, Fred L.....13530 Michigan, Dearborn
Robinson, George W. (L).....
1701 E. Grand Blvd., Detroit 11
Robinson, H. A.....987 E. Jefferson, Detroit 7
Robinson, Howard.....953 Fisher Bldg., Detroit
Robinson, J. H., Jr. (A).....
1553 W. Grand Blvd., Detroit 8
Robinson, R. G.....3751 31st St., Detroit 10
Roe, Chester, Jr.....16646 Woodingham Dr., Detroit 21
Roeglin, O. F. F.....
18412 Mack Ave., Grosse Pointe Farms 30
Rogers, Aaron Z.....
20451 Mack Ave., Grosse Pointe Woods
Rogers, George E. B.....
2108 David Broderick Tower, Detroit 26
Rogers, James D.....2966 Biddle Ave., Wyandotte
Rogers, J. T.....
16921 James Couzens Hwy., Detroit 19
Rogin, James R.....3027 David Stott Bldg., Detroit 26
Rogoff, Abraham S.....676 Maccabees Bldg., Detroit 2
Rohde, Paul C.....912 Maccabees Bldg., Detroit 2
Rom, Jack.....8600 W. McNichols Road, Detroit 35
Roman, Stanley J.....742 Maccabees Bldg., Detroit 2
Ronayne, J. J.....16116 W. McNichols Road, Detroit
Roney, Eugene H.....17187 Schaefer Highway, Detroit
Rosbolt, Oscar P.....8505 Plymouth Road, Detroit 4
Rosefield, John L.....65 W. Hancock, Detroit 1
Rosen, Harold M.....8830 W. McNichols, Detroit 21
Rosen, T. S.....18700 Meyers, Detroit
Rosenbaum, Herbert....19776 Snowden Ave., Detroit 35
Rosenbloom, Alvin B.....17555 Parkside, Detroit 21
Rosenthal, Louis H.....1318 Maccabees Bldg., Detroit
Rosenthal, Samuel A.....16350 Hamilton, Detroit 3
Rosenwach, F. F.....
19149 W. Seven Mile Road, Detroit 19

Rosenzweig, Saul.....
2114 David Broderick Tower, Detroit 26
Ross, B. C.....4493 14th St., Detroit
Ross, Donald G.....
654 St. Clair at Kercheval, Grosse Pointe
Ross, Hyman.....19149 Joy Road, Detroit 28
Rotarius, Edward M.....
1030 South Brys Drive, Grosse Pointe Woods, 36
Roth, Edward T.....640 E. Grand Blvd., Detroit 7
Roth, Theodore I.....60 W. Hancock, Detroit
Rothbart, Harold B.....773 Fisher Bldg., Detroit 2
Rothman, Emil D.....19467 Livernois, Detroit 21
Rothman, H. R.....20171 Canterbury, Detroit 21
Rottenberg, Leon.....13419 Fenkell, Detroit 27
Rourke, R. F.....3390 Piquette, Detroit 11
Rowda, Michael S.....2001 E. Grand Blvd., Detroit 11
Rucker, Julian J.....668 Farnsworth Ave., Detroit 2
Ruedemann, A. D. Jr. (M).....
1018 Three Mile Drive, Grosse Pointe Park
Ruedemann, A. D.....
1633 David Whitney Bldg., Detroit 26
Rueger, Milton J.....708 Kales Bldg., Detroit 26
Rueger, Ralph C.....9149 E. Jefferson, Detroit 14
Runge, Edward F.....Rouge River Dr., Dearborn
Rupe, C. E.....Henry Ford Hospital, Detroit 2
Rupp, Jacob R.....7056 W. Fort St., Detroit 9
Rupprecht, E. F.....5525 W. Chicago, Detroit 4
Ruskin, Samuel H.....
1306 David Broderick Tower, Detroit 26
Russell, John C. (L).....2934 E. Davidson St., Detroit 3
Rutzen, Arthur C.....771 Fisher Bldg., Detroit 2
Ryan, C. F.....13960 Montrose, Detroit 27
Ryan, James M.....19207 Schaefer Road, Detroit 35
Ryan, W. D.....6389 Tuxedo, Detroit 4
Rydzewski, Jos. B. .....12170 Jos. Campau, Detroit 12
Ryerson, F. L. (A).....630 Merrick, Detroit 3
Ryerson, F. S. (M).....
Capt. MC, USAH, Camp Chaffee, Ark.

Sack, Anthony G.....2567 W. Grand Blvd., Detroit 8
Sacchetti, J. V.....Wayne Co. General Hosp., Eloise
Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Sadler, Henry H., Jr.....15 Kercheval, Detroit
Sadzikowski, Joseph T.....1320 N. Denwood, Dearborn
Sage, Bernard A.....1013 Haigh, Dearborn
Sage, Edward O. (E).....415 Burns Drive, Detroit
Sage, Thomas.....7815 E. Jefferson, Detroit 14
Sager, Edward L.....13902 Gratiot Ave., Detroit 5
St. Amour, Hector J.....9545 Grand River, Detroit
St. Louis, R. J.....10909 W. Jefferson, River Rouge 18
Sakorraphos, Stelios.....1346 Broadway, Detroit 26
Salchow, Paul T., Med Dr.....
Herman Kiefer Hospital, Detroit
Salisbury, Carolyn S.....527 Professional Bldg., Detroit
Salmeri, E. J.....636 Maccabees Bldg., Detroit 2
Salomon, James L.....
Ford Motor Corp., P.O. Box 3668,
Highland Park 3
Salowich, John N.....15235 Harrison, Allen Park
Saltzstein, Harry C.....966 Fisher Bldg., Detroit 2
Sand, Harry H.....24110 Oxford, Dearborn
Sander, F. V., Jr.....344 Glendale, Highland Park
Sander, Irvin W.....5050 Cass Ave., Detroit 2
Sanders, Alex W.....920 Maccabees Bldg., Detroit 2
Sanderson, Alvord R.....
978 Pemberton Road, Grosse Pointe Park
Sanderson, Suzanne M.....
The Shelton Hotel, 15 E. Kirby, Detroit
Sandler, Nathaniel.....1004 Kales Bldg., Detroit 26
Sandweiss, D. J.....9739 Dexter Blvd., Detroit 6
Sapala, M. Andrew.....6356 Michigan, Detroit
Saraf, L. B.....14540 E. Warren, Detroit
Sargent, Richard C.....17357 Fenkell Ave., Detroit 27
Sargent, William R.....17357 Fenkell Ave., Detroit 27
Sarracino, J. B. (M).....
97th Gen. Hosp., APO 757 c/o P.M., New York
Sauk, John J.....302 W. McNichols Rd., Detroit
Sauter, Simon H.....1082 E. Grand Blvd., Detroit 7
Savignac, Eugene M.....4777 E. Outer Drive, Detroit 12
Scarney, Herman D.....573 Fisher Bldg., Detroit 2
Schaeffer, Martin.....16861 Wyoming, Detroit 21
Schaefer, R. L.....1206 Kales Bldg., Detroit 26
Schaefer, R. L., Jr.....1204 Kales Bldg., Detroit 26
Schane, David (A).....17157 Mendota, Detroit 21
Scheinberg, Schayel.....966 Fisher Bldg., Detroit
Schembeck, I. S.....
1655 David Whitney Bldg., Detroit 26
Schiff, Donald W. (M).....
U.S.P.H. Service, Turtle Mt. Consolidated Indian
Agency, Belcourt, N. D.
Schiller, A. E.....
2008 David Broderick Tower, Detroit
Schillinger, Harold K.....4838 Neckel, Dearborn
Schimek, R. A.....Henry Ford Hospital, Detroit 2
Schirack, R. D.....Luzerne
Schkloven, Norman.....20051 Warrington, Detroit 21
Schlafer, Nathan H.....
1806 David Broderick Tower, Detroit 26
Schlemer, John H.....13826 Dexter Blvd., Detroit 6
Schlesinger, Henry.....13534 Woodward, Detroit 3
Schmaltz, John D.....
1701 David Broderick Tower, Detroit
Schmidt, Harry E.....667 Fisher Bldg., Detroit 2
Schmidt, Milton R.....2615 W. Jefferson, Trenton
Schmidt, Werner F.....1807 Mutual Bldg., Detroit
Schmier, Burton L.....5440 Cass, Detroit 2
Schmitt, Norman L.....10127 W. McNichols, Detroit 21
Schneck, R. J.....
641 David Whitney Bldg., Detroit 26
Schneider, Charles L.....22148 Michigan Ave., Dearborn
Schneider, Curt P.....655 Fisher Bldg., Detroit 2
Scholes, Daniel R.....113 Martin Place, Detroit 1
Schooten, Sarah S.....
13700 Woodward Ave., Highland Park 3
Schorr, Robert L. (E).....1325 E. Jefferson, Detroit 7
Schreiber, Frederic.....10 Peterboro, Detroit 1
Schrier, C. F.....336 Devonshire, Dearborn
Schroeder, Carlisle F.....7815 E. Jefferson, Detroit
Schuknecht, H. F.....Henry Ford Hospital, Detroit 2
Schulte, Carl H.....800 Mutual Bldg., Detroit 26
Schultz, Ernest C.....
840 David Whitney Bldg., Detroit 26
Schwartz, Ben.....275 W. Grand Blvd., Detroit 16
Schwartz, Louis A.....861 Fisher Bldg., Detroit 2
Schwartz, Oscar D.....
7441 West Seven Mile Road, Detroit
Schwartzberg, Jos. A.....19445 Plymouth, Detroit
Schweigert, C. F.....10627 Cadieux, Detroit 24
Schwocho, N. H.....6525 Park, Allen Park
Sciarrino, Stanley V.....15388 Livernois, Detroit 21
Scott, Marrion U.....79 Kercheval, Detroit 36
Scott, R. J.....7333 W. Seven Mile Road, Detroit 21
Scott, William J.....79 Kercheval, Grosse Pointe Farms
Seabrooks, B. F. Jr.,.....9136 Oakland Ave., Detroit
Secord, Eugene W.....761 Fisher Bldg., Detroit 2
Seeley, James B.....13530 Michigan Ave., Dearborn
Seeley, Ward F.....1807 David Whitney Bldg., Detroit 26
Segar, Laurence F.....
1410 David Broderick Tower, Detroit 26
Segel, N. P.....2116 David Stott Bldg., Detroit 26
Seiber, Alvin H. (L).....
1180 Bedford Road, Grosse Pointe Park 30
Seiferlein, A. L.....508 David Whitney Bldg., Detroit 26
Self, William G.....19365 Mack Ave., Detroit
Seligson, Alvin.....Receiving Hospital, Detroit
Sellers, Graham A.....2405 W. McNichols Road, Detroit 21
Sellers, Charles W.....2314 W. Grand Blvd., Detroit 8
Selman, J. H.....8942 Dexter Blvd., Detroit 6
Serrester, Bernard F.....18650 W. Warren, Detroit 10
Seski, Arthur G.....863 Fisher Bldg., Detroit 2
Sewell, George....1116 David Whitney Bldg., Detroit 26
Sewell, Guy W.....16321 Mack Ave., Detroit 24
Shafarman, Eugene M.....5320 John R., Detroit 2
Shaffer, Jos. H.....2401 Rodner Drive, Birmingham
Shaffer, Loren W.....
325 Kercheval, Grosse Pointe Farms 36

Shafter, Royce R.....Eastlawn Sanatorium, Northville
Shanoski, Stanley J.....728 Maccabees Bldg., Detroit 2
Shapiro, I. Allen.....4400 Livernois, Detroit 21
Shapiro, Jacob.....15085 E. Seven Mile Rd., Detroit
Shapiro, Reuben I.....636 Maccabees Bldg., Detroit
Sharp, E. A.....Parke Davis & Company, Detroit
Sharrer, Charles H.....16840 E. Warren, Detroit 24
Shekerjian, Armen.....Mt. Carmel Hospital, Detroit 21
Sheldon, J. A. (L).....
1435 Three Mile Drive, Grosse Pointe Park 30
Sheldon, Warren E.....14215 W. McNichols Road, Detroit
Shellhammer, C. S.....438 Maccabees Bldg., Detroit
Shelton, C. F.....910 David Broderick Tower, Detroit 26
Sheppard, Emma L. W...7245 Engleman Ave., Centerline
Sherman, William LaRue.....10 Peterboro, Detroit 1
Sherman, Wm. L., Jr.....201 E. Kirby, Detroit 2
Sherrin, E. R.....17555 James Couzens Hwy., Detroit 35
Sherwood, DeWitt L. (L).....
6170 Michigan Ave., Detroit 10
Shewchuk, Alexander P.....7300 Allen Road, Allen Park
Shields, William L.....18600 Woodward, Detroit 3
Shifrin, Peter G.....767 Fisher Bldg., Detroit 2
Shiovitz, Louis.....5419 Michigan Ave., Detroit 10
Shipley, R. E. (M).....14201 Woodmont, Detroit
Shipton, W. H.....1145 Balfour, Grosse Pointe
Shlain, Benjamin.....10244 W. 7 Mile Road, Detroit
Shortz, Gerald.....
1649 Broadstone Road, Grosse Pointe Woods 30
Shotwell, Carlos W. (L).....
1411 Atkinson Ave., Detroit 6
Shreve, Alfred J.....10149 Michigan, Dearborn
Shulak, Irving B.....
1714 David Broderick Tower, Detroit 26
Shulman, Herschel A.....622 Maccabees Bldg., Detroit
Shumaker, E. J.....22691 Michigan, Dearborn
Siddall, Roger S.....955 Fisher Bldg., Detroit 2
Sieber, Edward H.....15146 Michigan Ave., Dearborn
Siefert, John L.....12645 Gratiot, Detroit
Siefert, William A.....17400 Grand River Ave., Detroit 27
Siegel, Henry.....10440 W. 7 Mile Road, Detroit 21
Siero, J. M.....9105 Van Dyke, Detroit 13
Sievers, Lorraine A.....Harper Hospital, Detroit 1
Sigler, J. W.....Henry Ford Hospital, Detroit 2
Sill, Jack A.....19635 Mack Ave., Detroit 30
Sillery, R. J.....1511 David Whitney Bldg., Detroit 26
Silvarman, I. Z.....9103 Van Dyke, Detroit 13
Silver, I. W.....20000 W. Chicago, Detroit 28
Silverman, Maurice M.....3925 Joy Road, Detroit 6
Silverman, Max.....11340 Dexter Blvd., Detroit 6
Simmons, Donald R. (M).....815 Kales Bldg., Detroit
Simon, Emil R.....1020 Maccabees Bldg., Detroit 2
Simon, Heinz G.....5097 Balfour Road, Detroit 24
Simpson, Clarence E. (L).....18448 Prest, Detroit 35
Simpson, G. E.....8721 E. Jefferson, Detroit
Sinclair, James W.....16404 E. Warren, Detroit 24
Singer, Floyd W.....24441 Emerson, Dearborn
Sippola, George W.....13603 LaSalle, Detroit 6
Sisson, John M.....17201 W. McNichols, Detroit
Sklover, I. I.....1326 E. 7 Mile Road, Detroit 3
Skully, Edward J.....13535 Woodward, Detroit
Sladen, F. J. (L).....Henry Ford Hospital, Detroit
Slahetka, Vincent E.....7435 Michigan, Detroit 10
Slaugenhaupt, J. G.....600 Griswold, Suite 602, Detroit 26
Slaughter, F. M.....455 E. Adams, Detroit 26
Slazinski, Leo W.....7618 Michigan, Detroit 10
Slevin, John G...1304 David Broderick Tower, Detroit 26
Sliwin, E. P.....641 David Whitney, Detroit
Slusky, Joseph.....1826 Oakman Blvd., Detroit
Slutzky, Gilbert.....Veterans Adm. Hosp., Dearborn
Sly, R. F.....22213 Tenny, Dearborn
Small, Henry.....11507 Hamilton, Detroit 2
Smathers, Homer M.....14001 Greenfield, Detroit 27
Smeck, Arthur R. (L).....1036 Waterman, Detroit 9
Smith, Clarence V.....1716 E. Grand Blvd., Detroit 11
Smith, Claude A. (L).....15 Linden St., River Rouge 18
Smith, F. J.....Henry Ford Hospital, Detroit
Smith, Henry L.....16401 Grand River Ave., Detroit 27
Smith, J. Allen.....14140 Puritan, Detroit 27
Smith, J. C.....8445 E. Jefferson, Detroit 14
Smith, R. W., Jr.....Henry Ford Hospital, Detroit 2
Smolenski, J. J.....5149 Joy Road, Detroit 4
Smyka, E. J.....6111 Charles, Detroit 12
Smyka, Stanley M.....716 Kales Bldg., Detroit 12
Snedeker, Bernard C.....18800 Woodward Ave., Detroit 3
Snider, J. J.....2332 Tuxedo, Detroit 6
Snow, L. W.....508 W. Main St., Northville
Snyder, Arthur M.....
13700 Woodward Ave., Suite 503, Detroit 3
Sobel, Robert A.....18254 Livernois, Detroit 21
Socall, Charles J.....8500 Mt. Elliott, Detroit 11
Sokol, William M.....10 Peterboro, Detroit 1
Sokolov, Raymond A.....755 Fisher Bldg., Detroit 2
Solomon, Abraham B. (M).....
1508 Lyon, Laredo, Texas
Somers, Donald C.....3919 John R., Detroit 1
Sonda, Lewis P.....544 David Whitney Bldg., Detroit 26
Sorock, Milton L.....19467 Livernois, Detroit 21
Spademan, Loren C.....
1013 David Whitney Bldg., Detroit 26
Sparling, Harold I. (M).....
2101-1 USA Hospital, Fort Meade, Maryland
Speck, Carlos C.....6525 Park Ave., Allen Park
Spector, Maurice J.....12504 E. Jefferson, Detroit 15
Spero, Gerald D.....7330 W. Seven Mile Road, Detroit, 21
Sperry, Frederick L.....463 Fisher Bldg., Detroit 2
Spiro, Adolph S.....11255 Mack Ave., Detroit 15
Springborn, B. R.....15818 E. Warren, Detroit 24
Sprunk, Carl J.....869 Fisher Bldg., Detroit 2
Squires, W. H.....Wayne County Gen. Hosp., Eloise
Stafford, Frank W. J.....1111 Griswold, Detroit
Stalker, Hugh.....411 Fisher Road, Grosse Pointe 30
Stamell, B. B.....658 Maccabees Bldg., Detroit
Stamell, Meyer.....14634 Greenfield, Detroit
Staniszewski, Casimir.....1301 W. Grand Blvd., Detroit
Stanton, James M.....1001 Mutual Bldg., Detroit
Stanton, Myron R.....3400 W. Warren, Detroit 8,
Stapleton, William J., Jr. (E).....
641 David Whitney Bldg., Detroit 26
Starrs, Thomas C. (L)..509 Fox Theater Bldg., Detroit 1
Staryk, Steven E.....19204 Keystone, Detroit 34
Staub, Howard P.....14382 Mansfield, Detroit 27
Staudt, L. W.....Chrysler Corp., Highland Park 3
Stearns, A. B.....504 Doctors Bldg., Detroit 1
Stebbins, Charles E.....856 Fisher Bldg., Detroit
Steele, C. H.....1144 David Whitney Bldg., Detroit 26
Stefani, E. L.....18455 James Couzens Hwy, Detroit 35
Stefani, Raymond T.....13516 Stoepel, Detroit 4
Steffensen, Ellis H.....Henry Ford Hospital, Detroit
Stein, Albert H.....19334 San Juan Drive, Detroit 21
Stein, James R.....125 W. 9 Mile Road, Ferndale
Stein, Saul C.....23105 Van Dyke, Van Dyke
Steinbach, Albert L.....
1229 David Whitney Bldg., Detroit
Steinbach, Henry B.....
1229 David Whitney Bldg., Detroit 26
Steinberger, Eugene.....
12901 W. Seven Mile Road, Detroit 35
Steinberger, Eugene J.....6402 W. Fort St., Detroit 9
Steiner, Frederick B.....29627 Ford Road, Garden City
Steiner, Gabriel.....10 Peterboro, Detroit 1
Steiner, L. J.....12636 Chelsea Ave., Detroit 13
Steinhardt, Milton J.....670 Maccabees Bldg., Detroit 2
Stellhorn, Chester E.....12900 W. 7 Mile Road, Detroit 21
Stellhorn, Mary Christine.....16616 Mack Ave., Detroit
Stempel, E. M.....17550 Ohio, Detroit 21
Stenborg, Walter P. (M)..1301 College Drive, Houghton
Stephens, Homer C.....4302 McGraw, Detroit
Sterba, Richard F.....1130 Parker, Detroit 14
Sterling, Robert R.....
1541 David Whitney Bldg., Detroit 26
Stern, Edward A.....12710 Dexter, Detroit 6
Stern, H. L.....14137 Warwick, Detroit 23
Stern, Julian.....1314 David Whitney Bldg., Detroit 26
Stern, Leonard H.....22699 Van Dyke, Van Dyke
Stern, Louis D.....1049 David Whitney Bldg., Detroit

Stevens, C. H.....15422 Manor, Detroit 21
Stevenson, Charles S.....1405 Kales Bldg., Detroit
Stewart, M. M., Jr.....411 Professional Bldg., Detroit
Stewart, Marjorie Ruth.....Lynn Hospital, Detroit 17
Stewart, Thomas O.....17187 Schaefer Hwy., Detroit 21
Stiefel, Daniel M.....
1563 David Whitney Bldg., Detroit 26
Stillwater, Karl.....18311 Appoline, Detroit 35
Stirling, A. M.....10 Peterboro, Detroit 1
Stith, Dwight E.....505 Owen, Detroit 2
Stobbe, Godfrey D.....Grace Hospital, Detroit
Stocker, Lawrence L.....7330 W. 7 Mile Rd., Detroit 21
Stocker, M. L.....116 N. Adams, Ypsilanti
Stockwell, B. W.....
703 Doctors Bldg., 3919 John R, Detroit
Stokfisz, Thaddeus.....7012 Michigan Ave., Detroit 10
Straith, Claire L.....2605 W. Grand Boulevard, Detroit 8
Straith, R. E.....2605 W. Grand Blvd., Detroit 8
Strand, Martin E.....22400 Cherry Hill, West Dearborn
Stricker, Henry D.....5624 W. Fort St., Detroit 9
Strickroot, Fred L.....707 Kales Bldg., Detroit
Strohschein, D. F.....1063 Fisher Bldg., Detroit 2
Strutz, Wm. C.....1553 Woodward Ave., Detroit
Stryker, Joan C.....2853 Biddle St., Wyandotte
Stryker, Walter A.....Wyandotte Gen. Hosp., Wyandotte
Stubbs, C. T.....13930 Woodward, Detroit 3
Stubbs, Harold W.....13930 Woodward, Detroit 3
Stuecheli, Milton B.....1230 Bishop Rd., Grosse Pointe
Stump, George D...1314 David Whitney Bldg., Detroit 26
Sugar, David I.....13120 Broadstreet, Detroit
Sugar, H. Saul.....311 Kales Bldg., Detroit
Sugarman, Marcus H.....9739 Dexter, Detroit 6
Sullivan, Hugh A...1053 David Whitney Bldg., Detroit 26
Sullivan, J. J. Jr. (M).....
440 East 23rd St., New York, New York
Summers, W. A.....1613 David Whitney Bldg., Detroit 26
Summers, W. S.....1613 David Whitney Bldg., Detroit 26
Surbis, John P.....22277 Long Blvd., Dearborn
Sutherland, Jacob M.....662 Fisher Bldg., Detroit 2
Suwinski, R. H.....9243 Joseph Campau, Detroit 12
Swan, Lionel F.....3400 McDougall, Detroit 7
Swanson, Carl W.....936 Alter Road, Detroit 15
Swanson, Cleary N.....
16921 James Couzens Highway, Detroit 27
Swanson, Robert G.....936 Alter Road, Detroit
Swartz, Fred G. Jr.....1229 David Whitney Bldg., Detroit
Sweeny, Donald N. Jr.....8445 E. Jefferson, Detroit 14
Sweeney, Francis X.....St. Joseph Hosp., Tacoma 3, Wash.
Swift, Karl .L.....869 Fisher Bldg., Detroit 2
Swihart, J. J.....912 Kales Bldg., Detroit 26
Switzer, Bertrand C.....17354 James Couzens, Detroit
Syphax, Charles S., Jr.....1819 E. Davison, Detroit
Szappanyos, B. J. (M).....2567 W. Grand Blvd., Detroit
Szejda, J. C.....3003 Harper, Detroit
Szilagyi, D. Emerick.....14638 Stahelin, Detroit 23
Szladek, F. J.....4045 W. Jefferson, Ecorse
Szmigiel, A. J.....7527 E. 7 Mile Road, Detroit 34

Talbot, Frank G. (M)....19154 Westmoreland, Detroit 19
Tallant, Edward J.....14001 Greenfield, Detroit
Tamblyn, E. J.....15315 E. Jefferson, Detroit 30
Tanner, Natalia M.....8033 Twelfth St., Detroit 6
Tapert, Julius C.....888 Chalmers, Detroit 15
Tasker, Helen E.....76 W. Adams, Detroit
Tassie, Ralph N.....14060 Saratoga, Detroit
Tatelis, Gabriel A.....1011 E. Grand Blvd., Detroit
Tatelman, Maurice.....410 Kales Bldg., Detroit 26
Taurence, William H.....1860 Ford, Wyandotte
Taylor, Aaron.....19438 Whitcomb, Detroit 35
Taylor, Ivan B...504 Doctor Bldg., 3919 John R, Detroit
Taylor, J. L.....1566 W. Grand Blvd., Detroit
Taylor, Nelson M.....654 St. Clair, Grosse Pointe 30
Taylor, W. V.....895 Coplin, Detroit 15
Tazzioli, Henry A.....21970 Moross Road, Detroit 36
Tear, Malcolm J. J.....5008 Trumbull Ave., Detroit 8
Teitelbaum, Myer.....405 Kales Bldg., Detroit 26
Tenaglia, Thomas A.....9 Salliotte, Ecorse 18
Tenerowicz, Rudolph G.....2925 Lehman, Detroit 12
Terry, Willard B. G., Jr.....
Peninsula General Hospital, Salisbury, Md.
Texter, Elmer C.....7457 Gratiot Ave., Detroit 13
Theuerle, W. I.....13300 Fenkell, Detroit 27
Thomas, D. F.....753 Fisher Bldg., Detroit 2
Thompson, Arthur Lee.....6125 Scotten, Detroit 10
Thompson, H. E.....2212 Clinton, Detroit 7
Thompson, H. O.....6014 W. Fort, Detroit 9
Thompson, W. A.....6125 Scotten, Detroit 10
Thomson, Daniel C.....2966 Biddle Ave., Wyandotte
Thornell, Harold E.....4839 Beaubien, Detroit 1
Thosteson, George C.....
1139 David Whitney Bldg., Detroit 26
Thumann, R. C., Jr...1757 David Whitney Bldg., Detroit
Thumin, Sadie.....15306 Joy Road, Detroit
Tkaczuk, Dmytro.....10345 Joseph Campau, Detroit 12
Toaz, Robert B.....13700 Woodward, Detroit 3
Tolbert, Vassal G.....3705 Hastings, Detroit 1
Tomsu, Charles L.....6170 Michigan Ave., Detroit 10
Torres, Estelle.....3985 Caniff, Detroit
Torres, Raul M., Jr.....1076 Maccabees Bldg., Detroit
Tourkow, L. P.....4741 Fullerton, Detroit 38
Townsend, Frank M.....1551 Trumbull, Detroit 16
Trader, Kenneth N.....951 Fisher Bldg., Detroit 2
Tregenza, W. K.....18530 Grand River, Detroit
Tremain, Harold L.....106 W. Davison, Detroit
Trinkaus, W. F.....20601 Harper, Detroit 36
Troester, George A.....1140 Maccabees Bldg., Detroit
Trombino, James F.....2567 W. Grand Blvd., Detroit 8
Trombley, Joseph J., Jr.....18595 Grand River, Detroit 23
Truba, Paul K.....1409 Kales Bldg., Detroit 26
Truszkowski, Edward G.....3411 Evaline, Detroit 12
Trythall, S. W.....13300 Livernois, Detroit 4
Tulloch, John.....923 David Whitney Bldg., Detroit
Tupper, Roy D.....15101 W. 7 Mile Road, Detroit 19
Turbett, Claude W. (L).....
4230 Commonwealth Ave., Detroit 8
Turcotte, Vincent J.....14015 Gratiot, Detroit 5
Turkel, Henry....1302 Industrial Bank Bldg., Detroit 26
Turnbull, Jack V.....22340 Michigan, Dearborn
Turner, J. J.....25447 Plymouth Road, Detroit
Tuttle, William M...307 David Whitney Bldg., Detroit 26
Tuynman, Peter E.....15865 Wyoming, Detroit 21
Ujda, Chester J.....3106 Washington, Wayne
Ulbrich, Henry L. (L).....
1540 Torrey Road, Grosse Pointe Woods 30
Ulrich, Willis H.....22365 Grand River, Detroit
Umphrey, Clarence E.....
15300 W. McNichols Road, Detroit 35
Unkefer, W. T.....1063 Fisher Bldg., Detroit 2
Usher, William Kay.....15605 Kercheval, Detroit 30
Vale, C. Fremont (R).....
2615 Via Tuscany, Winter Park, Fla.
VandenBerg, Henry J., Jr.....
816 David Whitney Bldg., Detroit 26
Van Eck, James E.....9165 Whittier, Detroit 24
Van Hoek, Donald E.....
2001 Lancaster, Grosse Pointe Woods 30
Van Hoey, Alger F.....
19154 James Couzens Highway, Detroit 21
Van Raaphorst, L. F.....1306 Kales Bldg., Detroit 26
Van Slyck, E. J.....2201 E. Jefferson, Detroit 7
VanRiper, Steven L.....1490 Iroquois, Detroit 14
Vardon, Edward M.....12897 Woodward Ave., Detroit 3
Vasu, V. O.....4829 Woodward, Detroit 1
Veling, William F.....1060 Fisher Bldg., Detroit 2
Vogel, Hyman A.....29901 Ford Road, Garden City
Vokes, Milton D.....10182 Gratiot Ave., Detroit
Vonder Heide, E. C.....17190 Strathmore, Detroit 21
Vossler, A. E.....825 David Whitney Bldg., Detroit 26
Waddington, Jos. E. G. (E).....
3818 Northwestern, Detroit 6
Waggoner, C. Stanley.....
541 David Whitney Bldg., Detroit 26
Waggoner, Lyle G.....
404 David Whitney Bldg., Detroit 26
Wainger, Max J.....
1012 David Broderick Tower, Detroit 26

Wainstock, Michael A.....
1508 David Broderick Tower, Detroit 26
Wakeman, Everal M.....22276 Garrison, Dearborn
Waldbott, George L.....2930 W. Grand Blvd., Detroit 2
Walker, George L.....526 Claremont, Dearborn
Walker, J. Paul.....1211 Bishop Rd., Grosse Pointe 30
Walker, Roger V...1255 David Whitney Bldg., Detroit 26
Walkowiak, Robert G.....716 Kales Bldg., Detroit 26
Wallace, S. Willard.....7815 E. Jefferson, Detroit 14
Walls, Arch.....17201 W. McNichols Road, Detroit
Walser, Howard Carleton.....566 Fisher Bldg., Detroit 2
Walsh, Francis P.....205 Professional Bldg., Detroit 1
Walter, Arthur W.....14201 Rutland, Detroit 27
Walter, Floyd J.....19600 Grand River, Detroit 23
Walters, Albert G.....11078 Gratiot Ave., Detroit 5
Waltz, Paul J.....16127 Woodward Ave., Detroit 3
Wangner, William F.....7220 Gratiot Ave., Detroit 13
Ward, C. H.....14834 Coyle, Detroit 27
Warner, J. F.....7850 E. Jefferson, Detroit 14
Warner, P. L.....10314 Puritan, Detroit 21
Warren, Irving A.....4100 W. McNichols Rd., Detroit 21
Warren, Wadsworth .....
1144 David Whitney Bldg., Detroit 26
Wassermann, Lewis C.....562 Maccabees Bldg., Detroit 2
Waszak, Charles J.....
2501 West Grand Boulevard, Detroit 8
Watkins, T. W.....18520 Grand River Ave., Detroit 23
Watson, Douglas J. .....15101 Plymouth Rd., Detroit
Watson, Harwood G. .....935 S. Military, Dearborn
Watson, J. Edwin .....2536 W. Grand Blvd., Detroit 8
Watts, Frederick B. .....16321 Mack, Detroit
Watts, Joseph.....742 Maccabees Bldg., Detroit 2
Watts, J. C. .....7360 Twelfth Street, Detroit 6
Watts, J. J. (A).....7360 Twelfth St., Detroit 6
Wayne, Morris A. .....18474 Roselawn, Detroit 21
Weaver, Clarence E. .....113 Martin Place, Detroit 1
Weaver, Delmar F.....571 Fisher Bldg., Detroit
Weber, Karl .....16400 E. Warren, Detroit 27
Webster, John E. ....840 David Whitney Bldg., Detroit 26
Weed, Milton R. .....1997 E. Grand Blvd., Detroit 11
Wehenkel, Albert M. (L) .....7356 12th St., Detroit 6
Weidner, J. H. .....
c/o Dearborn Engineering Lab., 21500 Oakwood, Dearborn
Weiner, Maurice B.....1114 Maccabees Bldg., Detroit 2
Weingarden, David .....13240 Vassar Drive, Detroit
Weingarten, J. S. .....275 W. Grand Blvd., Detroit 16
Weinstein, Jacob .....4237 Grand River Ave., Detroit 8
Weisberg, A. A.....20 W. 7 Mile Rd., Detroit 3
Weisberg, Harry .....618 Maccabees Bldg., Detroit 2
Weisberg, Jacob.....618 Maccabees Bldg., Detroit 2
Weisenthal, Irvin.....5764 Woodward, Detroit 2
Weiser, Frank A. .....4162 John R., Detroit
Weiss, Casimer P. .....10040 Joseph Campau, Detroit 12
Weiss, J. G. .....2237 W. Grand Blvd., Detroit 8
Weiss, W. W. (A).....60 W. Hancock, Detroit 1
Welch, John H. ....18550 W. Outer Drive, Dearborn 7
Welch, W. K. (M).....No Address
Weller, Charles N. .....730 Watervale Road., Arcadia
Wells, Martha L. .....760 Fisher Bldg., Detroit
Weltman, Carl G. ....
1701 David Whitney Bldg., Detroit 26
Wendel, Jacob S.....744 David Whitney Bldg., Detroit 26
Wenzel, Jacob F. .....1006 Kales Bldg., Detroit 26
Werle, Peter Paul .....1420 St. Antoine, Detroit 26
West, G. A. .....6310 Mack Ave., Detroit 7
West, H. G.....12739 Puritan, Detroit 27
Westmaas, W. J.....19371 Sussex, Detroit
Weston, Bernard .....3200 Tyler, Detroit 6
Weston, Earl E. .....
18101 James Couzens Highway, Detroit 21
Weston, Horace L. .....703 Mutual Building, Detroit 26
Weston, Jean K. .....444 Lodge Drive, Detroit 14
Weyher, Russell F. ....5383 Oakman Boulevard, Detroit 4
Whalen, Neil J.....1515 David Whitney Bldg., Detroit 26
Wharton, Thomas V.....1809 Oak St., Wyandotte
Wheeler, S. C.....19207 Schaefer, Detroit 21
Whelan, Joseph L.....28 West Adams Ave., Detroit 26
Whinnery, Randall A.....752 Fisher Bldg., Detroit 2
Whitcomb, C. E. (M).....
8286th AUSC, Box 327, APO No. 438 c/o P.M., San Francisco
White, Donald H.....1313 Cleveland, Lincoln Park 25
White, D. L.....2900 S. Fort St., Detroit 25
White, Milton W.....2329 E. Grand Blvd., Detroit 11
White, Prosper D.....58 W. Adams Ave., Detroit 26
White, Theodore M.....7159 Michigan Ave., Detroit 10
Whitehead, Leston S.....
1718 David Whitney Bldg., Detroit 26
Whitehead, Walter K.....
413 David Whitney Bldg., Detroit 26
Whiteley, Robert K.....
541-3 David Whitney Bldg., Detroit 26
Whitelock, E. H.....1809 Oak St., Wyandotte
Whitney, Elmer L.....Henry Ford Hospital, Detroit 21
Whitney, Rex E.....5525 W. Chicago Blvd., Detroit 4
Whittaker, Alfred H.....1427 E. Jefferson, Detroit 7
Wiant, John L.....309 Professional Bldg., Detroit 1
Wiechowski, Henry E.....10345 Joseph Campau, Detroit
Wiener, Israel.....13011 W. McNichols Road, Detroit 35
Wiener, Morton.....612 Kales Bldg., Detroit 26
Wieterson, Fred K.....260 Manor Rd., Rt. 2, Birmingham
Wight, Fred B.....1048 David Whitney Bldg., Detroit 26
Wikiera, Edward S.....1515 Kales Bldg., Detroit 26
Wilcox, L. F.....110 Professional Bldg., Detroit 1
Wiley, William M.....17041 Waveney, Detroit 24
Wilhelm, R. E.....530 N. Telegraph Rd., Dearborn 7
Wilhelm, Seymour K.....
13011 W. McNichols Rd., Detroit 21
Wilkinson, A. P.....974 Fisher Bldg., Detroit 2
Williams, Clarence J.....
15324 E. Jefferson, Grosse Pte. Park 30
Williams, Delford G., Jr.....8540 12th St., Detroit
Williamson, J. C. (A).....3660 McKinley, Dearborn
Wilner, I. A.....17701 W. McNichols Road, Detroit 35
Wilson, Andrew G.....4741 Spokane, Detroit
Wilson, Gerald A.....4741 Spokane, Detroit 4
Wilson, G. S.....4741 Spokane, Detroit 4
Wilson, M. C.....15439 Harper, Detroit 24
Wilson, Stuart C.....10 Peterboro, Detroit 1
Wilson, W. J., Jr.....749 David Whitney Bldg., Detroit
Winnick, Lawrence C.....19120 Snowden, Detroit
Wishropp, E. A.....227 Kenwood Court, Grosse Pointe
Winton, George J.....1007 David Stott Bldg., Detroit 26
Wise, Robert K.....15801 W. McNichols, Detroit 35
Wissman, H. C.....6815 Oakman Blvd., Dearborn
Wittenberg, Arthur A.....7101 W. Chicago, Detroit
Wittenberg, Samson S.....934 Maccabees Bldg., Detroit 2
Wittenberg, S. S.....4400 Livernois, Detroit 10
Witter, Joseph A.....344 Glendale, Detroit 3
Witus, Carl.....18412 Mack Ave., Detroit 24
Witus, Morris.....9036 Dexter Blvd., Detroit 6
Wolever, T. H.....Henry Ford Hospital, Detroit 1
Wolfe, Max O.....7-260 Gen. Motors Bldg., Detroit 2
Wollank, Helen Wilson....15324 E. Jefferson, Detroit 30
Wollenberg, R. A. C. (L).....
939 David Whitney Bldg., Detroit 26
Wolter, J. G.....Mt. Carmel Mercy Hosp., Detroit 21
Wood, A. L.....2018 N. Telegraph, Dearborn
Wood, G. P.....2730 E. Jefferson, Detroit, 7
Wood, Kenneth.....3919 John R., Detroit 1
Wood, Wilford C.....463 Fisher Bldg., Detroit 2
Woodworth, W. P. (L).....153 E. Elizabeth, Detroit
Woolfenden, Joseph B.....16321 Mack Ave., Detroit
Worzniak, Joseph J.....2312 Biddle St., Wyandotte
Wreggit, Winston R...79 Highland Ave., Highland Park 3
Wright, C. H.....1549 W. Grand Blvd., Detroit 8
Wright, Lance S. Jr. (A).....728 S. Main St., Plymouth
Wruble, Joseph.....411 Seldon, Detroit
Wunsch, Richard E.....7815 E. Jefferson, Detroit 14

Yamasaki, Ken.....3465 Chatsworth, Detroit 24
Yarrows, Morton.....455 Medbury, Detroit
Yates, Arthur J. W.....8045 E. Jefferson, Detroit
Yates, J. Lewis.....Henry Ford Hospital, Detroit 2
Yesayian, H. G.....609 Kales Bldg., Detroit 26

Yetzer, William J.....760 Fisher Bldg., Detroit
Yoder, R. R.....41001 E. 7 Mile Rd., Northville
Yott, William J.....5243 Bishop, Detroit 24
Young, Donald A.....14807 W. McNichols, Detroit
Young, Donald C.....1151 Taylor Ave., Detroit
Young, I. I.....Detroit Receiving Hospital, Detroit 26
Young, Lloyd B.....857 Fisher Bldg., Detroit 2
Young, Viola M.....10 Peterboro, Detroit 1
Young, Watson A.....3508 Harrison Ave., Inkster
Zabinski, Edward J.....19036 Van Dyke, Detroit 12
Zackheim, Herschel S.....22265 Garrison, Dearborn
Zawacki, Sigmund.....22214 Ford Rd., Dearborn
Zawadzki, E. S.....14961 Piedmont Ave., Detroit
Zbikowski, Joseph.....Wayne Co. Gen. Hosp., Eloise
Zbudowski, Myron R.....2758 Belmont, Hamtramck
Zemens, Joseph L.....1580 E. Grand Blvd., Detroit 23
Ziegler, Robert F.....Henry Ford Hospital, Detroit
Zielinski, Charles J.....18900 W. Warren, Detroit 28
Zinn, George H.....641 David Whitney Bldg., Detroit 26
Zinterhofer, John.....
27621 Santa Barbara Dr., Rt. 6, Birmingham
Zolliker, Margaret Z.....20390 Harper Ave., Detroit
Zonnis, M. E.....1064 Fisher Bldg., Detroit 2
Zuelzer, Wolfgang W.....Children's Hospital, Detroit
Zukowski, H. J.....
1916 Manchester Blvd., Grosse Pointe Woods, 30
Zukowski, Sigmund A.....6626 Van Dyke, Detroit 13
Zweng, H. C.....Receiving Hospital, Detroit 26

WEXFORD COUNTY

Cardinal, Thomas H.....419 Stimson St., Cadillac
Daugharty, Robert V.....726 E. Division St., Cadillac
Holm, Augustus (L)....828 Seventeenth St., Moline, Ill.
Inman, J. C.....Lake City
Lommen, R. G.....Manton
Merritt, C. E.....Manton
Moon, William W.....124 E. Cass, Cadillac
Moore, Gregory P.....734 Division St., Cadillac
Murphy, Michael R.....120 E. Cass St., Cadillac
Paye, Philip H.....311 Evart, Cadillac
Posthuma, Millard M.....423 E. Cass St., Cadillac
Purdy, C. S. (L).....Buckley
Seger, D. W.....Lake City
Smith, W. J.....E. Harris St., Cadillac
Stokes, William H.....Lake City
Tornberg, Gordon C.....124 E. Cass St., Cadillac

HONORARY MEMBERS

Brake, D. Hale.....State Capitol, Lansing
Cline, John W.....3467 Pacific Ave., San Francisco, Calif.
de Kruif, Paul, Ph.D.....Wake Robin, Holland
Kahlke, Charles E.....Benton Harbor
Potter, LeRoy A.....Mich. Dept. of Health, Lansing
Tompkins, C. E.....680 Pipestone, Benton Harbor
Upjohn, Lawrence N.....
Upjohn Co., 301 Henrietta St., Kalamazoo

Woman's Auxiliary

Roster, 1954

ALLEGAN COUNTY

Brown, Mrs. L. F.....451, W. Allegan, Otsego
Brunson, Mrs. E. T.....Ganges
Chase, Mrs. Walter E.....Martin
Clark, Mrs. James.....Box B, Fennville
Corkill, Mrs. C. C.....Douglas
Gaude, Mrs. Gordon.....Hopkins
Vander Kolk, Mrs. Bert.....Hopkins
Mahan, Mrs. James.....400 Trowbridge, Allegan
Miller, Mrs. Kenneth.....Rt. No. 2, Fennville
Mitchell, Mrs. A. B.....River View Park, Allegan
Ramseyer, Mrs. Gladwin.....421 Marrell St., Plainwell
Rickert, Mrs. Ruth.....219 River St., Allegan

BAY COUNTY

Alcorn, Mrs. Kent.....2211 McKinley Street, Bay City
Alcorn, Mrs. Marshall.....210 Pendleton, Bay City
Asline, Mrs. J. Norris.....406 Pine Street, Essexville
Allen, Mrs. A. D.....Two Mile Rd., R.F.D., Bay City
Andrews, Mrs. F. T.....1414 McKinley, Bay City
Baird, Mrs. Fred.....30 Hendrick Dr., Lagoon Beach, Bay City
Baird, Mrs. Thomas.....235 Washington, Bay City
Bowman, Mrs. David.....1917 Fifth St., Bay City
Brown, Mrs. G. M.....2257 Carroll Rd., Bay City
Campbell, Mrs. John.....1813 McKinley, Bay City
Chapin, Mrs. F. J.....2121 Center St., Bay City
Connelly, Mrs. C. J.....906 Borton Avenue, Essexville
Cosens, Mrs. Stanley A.....701 Webb, Bay City
Criswell, Mrs. R. H.....2131 Center Avenue, Bay City
Crissey, Mrs. Robert H.....2144 Fifth St., Bay City
DeWaele, Mrs. Paul.....1106 N. Johnson St., Bay City
Drummond, Mrs. Fred.....Kawkawlin
Dumand, Mrs. V. H.....1700 Center, Bay City
Foster, Mrs. L. F.....1803 McKinley Ave., Bay City
Freel, Mrs. J. A.....2202 Eleventh St., Bay City
Gamble, Mrs. W. G.....2010 Fifth Ave., Bay City
Gale, Mrs. H. M.....517 N. Van Buren, Bay City
Gehman, Mrs. J. R.....Omer
Gunn, Mrs. Robert.....810 Germania, Bay City
Hagelshaw, Mrs. G. L.....1203 Fifth Ave., Bay City
Heuser, Mrs. Harold.....2021 Sixth Street, Bay City
Horowitz, Mrs. S. F.....Sovereign Dr., Bay City
Howland, Mrs. Walter.....Pinconning
Huckins, Mrs. E. S.....436 Cass Avenue, Bay City
Huckins, Mrs. Roger.....404 Trumbull St., Bay City
Husted, Mrs. F. Pitkin.....2007 Center St., Bay City
Jacoby, Mrs. A. H.....2202 Ninth, Bay City
Jens, Mrs. Otto.....1106 Prairie, Essexville
Johnson, Mrs. O. J.....105 Park Wood, Bay City
Jones, Mrs. Culver.....1024 Rosemary Lane, Essexville
Knobloch, Mrs. H. T.....1911 Center, Bay City
MacRae, Mrs. L. D.....813 N. Sherman St., Bay City
McDonnell, Mrs. W. R.....Box 600, Pinconning
McEwan, Mrs. J. H.....2310 Nurmi Drive, Bay City
McGee, Mrs. Henry.....204 N. Mountain, Bay City
McLurg, Mrs. John.....1900 Center, Bay City
Medvesky, Mrs. M. J.....314 Hill St., Bay City
Miller, Mrs. Edwin C.....614 Nurmi Ct., Bay City
Moore, Mrs. G. W.....200 N. Barclay, Bay City
Moore, Mrs. N. R.....2140 Fifth St., Bay City
Mosier, Mrs. D. J.....307 W. Midland, Bay City
Pearson, Mrs. S. M.....501 W. Jenny St., Bay City
Perkins, Mrs. R. C.....2118 Fifth Ave., Bay City
Reddick, Mrs. Charles.....1708 Tenth St., Bay City
Reuter, Mrs. C. W.....5561 Gaertner Ct., Bay City
Ruggles, Mrs. F. E.....605 N. Lincoln St., Bay City
Shafer, Mrs. Harold.....424 Green, Bay City
Slattery, Mrs. M. R.....909 N. Lincoln St., Bay City
Staley, Mrs. Hugh.....Omer
Stinson, Mrs. Walter S.....Ann Court, Kiesel Road, Bay City
Swantek, Mrs. John.....240 Washington, Bay City
Switzer, Mrs. L. W.....2150 Second St., Bay City
Tampkins, Mrs. Danna.....Pinconning
Tarter, Mrs. C. S.....1712 Center Avenue, Bay City
Taylor, Mrs. Robert.....4656 Richardson Dr., Bay City
Tehari, Mrs. Zai.....520 Webb Drive, Bay City
Urmston, Mrs. P. R.....1862 McKinlay St., Bay City
Wilcox, Mrs. J. W.....210 Gates, Bay City
Wilson, Mrs. T. G.....414 N. Farragut St., Bay City
Wittwer, Mrs. E. A.....107 N. Erie St., Bay City
Woodburne, Mrs. H. L.....1107 Borton, Essexville
Wright, Mrs. Thomas.....531 Handy Drive, Bay City
Zaremba, Mrs. A. J.....108 S. Madison St., Bay City
Ziliak, Mrs. A. L.....Kiesel Road, Bay City

BERRIEN COUNTY

Bailey, Mrs. John.....2150 Samuel, Benton Harbor
Bliesmer, Mrs. August.....2108 Morton Ave., St. Joseph
Bronfenbrenner, Mrs. J.....1227 Harriet, St. Joseph
Butler, Mrs. Wm. J.....2216 Lakeview, St. Joseph
Cawthorne, Mrs. H. J.....192 Robbins, Benton Harbor
Conybeare, Mrs. R. C...234 Orchard Lane, Benton Harbor
Cooper, Mrs. Wm. Leroy.....901 Wisconsin, St. Joseph
Cowdery, Mrs. K. H.....1620 Niles Ave., St. Joseph
Crowell, Mrs. Richard C.....1920 Sunset Court, St. Joseph
Elliot, Mrs. J. Colin.....111 Chippewa, Buchanan
Emery, Mrs. Clayton S.....1329 Lake Blvd., St. Joseph
Emery, Mrs. Wm. K.....
c/o Lt. Wm. K. Emery, M.C., U.S.A.H., Bad Cannsadt A.P.O. 154 c/o P.M., N. Y., N.Y.
Faber, Mrs. Michael.....176 W. Napier, Benton Harbor
Fattic, Mrs. G. R.....806 S. 3rd St., Niles
Feeley, Mrs. Marshall.....Tarawa Terrace II, Camp Le Juene, North Carolina
Galles, Mrs. James O.....1819 Heath Ct., Benton Harbor
Garrett, Mrs. E. L.....M-40, Niles
Hassan, Mrs. D. Kent.....606 Rynearson, Buchanan
Hayes, Mrs. Thomas P.....2716 Thayer Dr., St. Joseph
Hershey, Mrs. N. J.....1648 Broadway, Niles
Howard, Mrs. Frank.....808 Columbus, Benton Harbor
Irgens, Mrs. E. R.....910 Kingsley, St. Joseph
Johnston, Mrs. Wm.....504 Sutherland, St. Joseph
Kelsall, Mrs. Harvey I.....900 Wolcott Ave., St. Joseph
Kennedy, Mrs. F. A.....582 Pearl, Benton Harbor

King, Mrs. B. B.....1290 Seneca, Benton Harbor
Klos, Mrs. Henry.....2121 Niles Ave., St. Joseph
Landgraf, Mrs. Robert L.....527 W. Main, Niles
Lindenfeld, Mrs. Fred H.....443 S. St. Joseph, Niles
Lininger, Mrs. Richard.....
1639 Shawnee Drive, Benton Harbor
Manning, Mrs. John.....1611 Forres Ave., St. Joseph
Moore, Mrs. Scott.....1649 Broadway, Niles
Padelford, Mrs. Wm. J.....815 Columbia, St. Joseph
Parker, Mrs. L. B.....614 N. Main, Berrien Springs
Porter, Mrs. Charles.....1539 Colfax, Benton Harbor
Pritchard, Mrs. Harold M.....1603 Ferry, Niles
Rague, Mrs. Paul.....2507 Willa Drive, St. Joseph
Ray, Mrs. Dean.....2019 Langley, St. Joseph
Reagan, Mrs. Robert.....232 Windsor, Benton Harbor
Rice, Mrs. Franklin G., Jr.....324 N. 4th St., Niles
Richmond, Mrs. Dean....218 Sunnybank Road, St. Joseph
Ruth, Mrs. J. Griswold....507 E. Britain, Benton Harbor
Skinner, Mrs. James.....2401 Dickey Rd.,
Thomas Woods No. 1, Augusta, Georgia
Sowers, Mrs. B. F.....Higman Park, Benton Harbor
Strayer, Mrs. J. C.....103 Moccasin, Buchanan
Strayer, Mrs. John W.....553 Grant St., Niles
Strick, Mrs. Marvin H.....1759 Commonwealth,
Benton Harbor
Swingle, Mrs. Alvin J.....252 Elvern Dr., Benton Harbor
Thorup, Mrs. D. W.....408 Britain Ave., Benton Harbor
Vastine, Mrs. R. J.....430 W. Chicago, Buchanan
Westervelt, Mrs. Herbert O...539 Pearl St., Benton Harbor
Winegar, Mrs. Alvin C.....797 Pipestone, Benton Harbor
Woodford, Mrs. Hackley E.....255 Oden, Benton Harbor

BRANCH COUNTY

Aldrich, Mrs. Napier.....162 Marshall St., Coldwater
Bailey, Mrs. J. E.....291 E. Chicago St., Coldwater
Beck, Mrs. P. C.....235 N. Walker St., Bronson
Coates, Mrs. Carl.....R.R. No. 1, Quincy
Culver, Mrs. Bert W.....72 Division St., Coldwater
Culver, Mrs. D. T.....78 Division St., Coldwater
Fraser, Mrs. Robert J.....156 E. Chicago, Coldwater
Gist, Mrs. Lemuel I.....300 E. Chicago St., Coldwater
Gomley, Mrs. Henry G.....435 W. Chicago, Bronson
Harris, Mrs. Donald.....25 N. Fremont St., Coldwater
Heffelfinger, Mrs. John....106 N. Hanchett St., Coldwater
Leitch, Mrs. Robert M.....Union City
Mitchell, Mrs. H. C.....State Home and Training School
Coldwater
Mooi, Mrs. H. R.....20 Fairfield, Coldwater
Moss, Mrs. Harvey.....86 W. Clarke St., Coldwater
Nettleman, Mrs. William....22 S. Jefferson St., Coldwater
Rennell, Mrs. E. J.....State Home & Training School,
Coldwater
Rick, Mrs. John.....63 N. Hudson St., Coldwater
Thomas, Mrs. J. A.....390 E. Chicago, Coldwater
Wade, Mrs. Robert L.....144 E. Chicago St., Coldwater
Walton, Mrs. N. J.....61 E. Chicago, Quincy
Weidner, Mrs. Harold R.....16 S. Fremont, Coldwater

CALHOUN COUNTY

Anderson, Mrs. Harold....1461 E. Michigan, Battle Creek
Amos, Mrs. N. H.....191 Waubascon Rd., Battle Creek
Barden, Mrs. Stewart.....Rt. 6, Box 912, Battle Creek
Baribeau, Mrs. Roy.....
1003 Capital Ave., S. W., Battle Creek
Becker, Mrs H. F.....
Morgan Road, Pennfield Twp., Battle Creek
Berghorst, Mrs. John.....89 S. LaVista, Battle Creek
Beucker, Mrs. Herman.....501 N. Kalamazoo, Marshall
Bodine, Mrs. Harold.....
634 Country Club Drive, Battle Creek
Bonifer, Mrs. Philip.....93 Clinton Drive, Battle Creek
Brainard, Mrs. Clifford.....
612 Jennings Landing, Battle Creek
Brown, Mrs. Robert.....106 Circle Drive, Battle Creek
Byland, Mrs. N. O.....107 Greenwood, Battle Creek
Campbell, Mrs. Jack.....203 Highland Ave., Battle Creek
Campbell, Mrs. R. J.....209 Emmett St., Battle Creek
Capron, Mrs. M. J.....102 Ann Ave., Battle Creek
Chandler, Mrs. Edward.....55 N. Broad, Battle Creek
Chynoweth, Mrs. W. R.....88 Ann Ave., Battle Creek
Colquhoun, Mrs. Graham F.....
6 Country Club Drive, Battle Creek
Diamante, Mrs. Paul.....26 Maryland Drive, Battle Creek
Fraser, Mrs. R. H.....198 Fremont St., Battle Creek
Finch, Mrs. D. L.....72 Jennings Rd., Battle Creek
Graubner, Mrs. F. L.....707 N. Linden, Marshall
Hansen, Mrs. Harvey C.....
Country Club Drive, Battle Creek
Haughey, Mrs. Wilfred.....R. No. 1, Hickory Corners
Heald, Mrs. C. W.....67 Oaklawn, Battle Creek
Herman, Mrs. L.....
Veterans Administration, Ft. Custer Battle Creek
Hibbs, Mrs. D. K.....117 Sunnyside, Battle Creek
Hills, Mrs. C. R.....210 Chestnut St., Battle Creek
Hollands, Mrs. Robert....1501 W. Michigan, Battle Creek
Holtom, Mrs. B. C.....78 Merwood Drive, Battle Creek
Hubly, Mrs. James.....203 Fremont St., Battle Creek
Humphrey, Mrs. Arthur.....
Country Club Drive, Battle Creek
Jeffrey, Mrs. J. R.....62 Ann Ave., Battle Creek
Jones, Mrs. Aubrey.....513 W. Michigan, Marshall
Keagle, Mrs. L. R.....41 Garrison, Battle Creek
Kelleher, Mrs. Geo. T.....56 Latta, Battle Creek
Kimball, Mrs. Arthur S.....
196 Capital Ave., N.E., Battle Creek
Kinde, Mrs. M. R.....48 Merwood Dr., Battle Creek
Kingsley, Mrs. A. F.....33 Byrand, Battle Creek
Kingsley, Mrs. Paul.....29 Merwood Drive, Battle Creek
Kolvoord, Mrs. Theodore.....47 Minges Rd., Battle Creek
LaFrance, Mrs. N.....
Veterans Administration, Ft. Custer, Battle Creek
Lam, Mrs. Francis L.....Sunnyside Drive, Battle Creek
Lancaster, Mrs. Vance B.....
119 Ridgeway Drive, Battle Creek
Leitch, Mrs. Robert.....Union City
Lowe, Mrs. Stanley.....12 Hiawatha Drive, Battle Creek
Lowe, H. M.....30 Emmett St., Battle Creek
Martin, Mrs. W. F.....608 The Inn, Battle Creek
McCuaid, Mrs. Alfred....815 S.W. Capital, Battle Creek
Meister, Mrs. Franklin O.....
315 Orchard Ave., Battle Creek
Melges, Mrs. Fred J.....314 N. Orchard St., Battle Creek
Morrison, Mrs. D. B.....199 Chestnut, Battle Creek
Mullenmeister, Mrs. Hugh F.....99 Fremont, Battle Creek
Olsen, Mrs. A. L.....
Veterans Administration, Ft. Custer, Battle Creek
Parkinson, Mrs. C. E.....1485 North Ave., Battle Creek
Patrick, Mrs. Gilbert T.....16 Hiawatha Hts, Battle Creek
Pearson, Mrs. D. J.....32 Hiawatha Hts., Battle Creek
Powers, Mrs. John.....206 Orchard Ave., Battle Creek
Robbert, Mrs. John.....164 Francis Drive, Battle Creek
Robbins, Mrs. Hugh.....237 Fremont, Battle Creek
Rosenfeld, Mrs. Jos.....70 Elizabeth St., Battle Creek
Royer, Mrs. Clark.....Sunnyside Drive, Battle Creek
Royer, Mrs. W. A.....100 N. Union, Battle Creek
Schwarz, Mrs. Frank.....31 Orchard Ave., Battle Creek
Shellenberger, Mrs. H. M.....131 W. Hanover, Marshall
Shipp, Mrs. Leland....611 Jennings Landing, Battle Creek
Simpson, Mrs. Robert S.....
135 Shadywood Lane, Battle Creek
Slagle, Mrs. Geo. W.....1702 Capital, S.W., Battle Creek

Sleight, Mrs. James.....Morgan Rd., Battle Creek
Stadle, Mrs. W. H.....607 Jennings Landing, Battle Creek
Stifel, Mrs. R. A...260 Wahwahraysee Way, Battle Creek
Tazelaar, Mrs. Myron A.....219 N. Madison, Marshall
Verity, Mrs. L. E.....64 St. Joseph Lane, Battle Creek
Walter, Mrs. F. R.....8 Woolnough, Battle Creek
Walters, Mrs. J. E.....265 Sherman Rd., Battle Creek
Way, Mrs. Kenneth.....315 N. Madison, Marshall
Wemmer, Mrs. Keith S.....94 Barney, Battle Creek
Wencke, Mrs. Carl G.....
127 Park Place, Country Club Hills, Battle Creek
Winslow, Mrs. Sherwood.....Hiawatha Dr., Battle Creek
Woodward, Mrs. Douglas.....205 W. Manchain, Marshall
Worgess, Mrs. Duane.....
45 W. Territorial Rd., Battle Creek
Yannitelli, Mrs. S. A.....
132 W. Hamilton Lane, Battle Creek
Zheutlin, Mrs. Bertram.....119 Grand Blvd., Battle Creek
Zindler, Mrs. Geo.....RFD No. 2, Lacy Rd., Battle Creek
Veterans Administration
Marino, Mrs. S. G.....Ft. Custer, Battle Creek
Sharp, Mrs. William.....Ft. Custer, Battle Creek
Smith, Mrs. J. S.....Ft. Custer, Battle Creek
Jones, Mrs. E. F.....Ft. Custer, Battle Creek

CASS COUNTY

Clary, Mrs. R. I.....403 Main St., Dowagiac
Comstock, Mrs. L. David..308 New York Ave., Dowagiac
Everett, Mrs. Dan W.....R.R. 2, Box 118, Edwardsburg
Hickman, Mrs. John K.....514 Green St., Dowagiac
Loupee, Mrs. George E.....310 W. Division St., Dowagiac
Loupee, Mrs. S. L.....108 Orchard St. Dowagiac
Lyman, Mrs. W. R.....309 W. Division St., Dowagiac
Zwergal, Mrs. E. H.....122 S. Fulton St., Cassopolis

CHIPPEWA-MACKINAC-LUCE COUNTIES

Adams, Mrs. D. C.....Newberry
Allott, Mrs. H. R.....Sault Ste. Marie
Blair, Mrs. H. M.....811 Summitt, Sault Ste. Marie
Clausen, Mrs. C. H.....300 Court St., Sault Ste. Marie
Cowan, Mrs. D. A.....140 Spruce St., Sault Ste. Marie
Finlayson, Mrs. D. D.....903 Prospect, Sault Ste, Marie
Gibson, Mrs. R. E.....Newberry
Goddard, Mrs. G. B.....Pickford
Hamel, Mrs. Herbert.....St. Ignace
Harrington, Mrs. H. M.....
3308 Lakeshore Dr., Sault Ste. Marie
Hicks, Mrs. R. P.....Newberry
Howe, Mrs. D. C.....Sault Ste. Marie
Koptik, Mrs. George.....Camp Lucas, Sault Ste. Marie
Mackie, Mrs. T. B.....Mission Rd., Sault Ste. Marie
Montgomery, Mrs. B. T.....309 Ashmun, Sault Ste. Marie
Purmort, Mrs. William R., Jr.....Newberry
Rhind, Mrs. E. S.....300 Court St., Sault Ste. Marie
Scott, Mrs. D. F.....506 North Ravine, Sault Ste. Marie
Surrell, Mrs. Matthew A.....Newberry
Thompson, Mrs. T. W.....Newberry
Trapasso, Mrs. Tony..208 Mission Rd., Sault Ste. Marie
Venier, Mrs. Anton.....1021 Parnell, Sault Ste. Marie
Yale, Mrs. I. V.....200 Ashmun, Sault Ste. Marie
Wallen, Mrs. L. J.....Sault Ste. Marie

DELTA-SCHOOLCRAFT COUNTIES

Anderson, Mrs. Francis.....1012 S. 11th St., Escanaba
Benson, Mrs. G. W.....724 S. 10th St., Escanaba
Bernier, Mrs. A. B.....Manistique
Boyce, Mrs. Donald H.....1401 S. 1st Ave., Escanaba
Brenner, Mrs. E. J.....Manistique
Carlton, Mrs. A. J.....502 S. 7th St., Escanaba
Defnet, Mrs. H. G.....250 Lake Shore Drive, Escanaba
Dehlin, Mrs. J. R.....1225 Minn., Gladstone
Frenn, Mrs. Nathan.....Bark River
Fyvie, Mrs. James E.....Manistique
Groos, Mrs. Harold.....421 Ogden, Escanaba
Groos, Mrs. Louis.....1015 S. 1st Ave., Escanaba
Harrison, Mrs. William.....403 S. 7th Ave., Escanaba
Hult, Mrs. Otto.....1204 Lake Drive, Gladstone
LeMire, Mrs. D. F.....1813 Lakeshore Drive, Escanaba
LeMire, Mrs. W. A., Jr.....318 Lakeshore, Escanaba
Lindquist, Mrs. N. L.....1815 Lakeshore Drive, Escanaba
McInerney, Mrs. T. A.....1029 S. 13th St., Escanaba
Miller, Mrs. A. H.....904 Wisconsin, Gladstone
Olson, Mrs. Carl.....623 Michigan Ave., Gladstone
Ryde, Mrs. Robert.....815 Lake Shore Drive, Escanaba
Walch, Mrs. John J.....800 Lake Shore Dr., Escanaba
Wehner, Mrs. Merle D.....540 Cherry, Manistique

DICKINSON-IRON COUNTIES

Addison, Mrs. E. R.....Crystal Falls
Anderson, Mrs. Donald T.....408 Hamilton, Kingsford
Alexander, Mrs. Wm. H...411 East C St., Iron Mountain
Boyce, Mrs. George H.....East D St., Iron Mountain
Cooper, Mrs. C. A.....407 Third, Stambaugh
Fiedling, Mrs. Wm.....Vulcan
Hayes, Mrs. W.....513 Norway, Norway
Huron, Mrs. W. H.....215 W. "E" St., Iron Mountain
Irvine, Mrs. L. E.....308 Sixth, Iron River
McCormick, Mrs. Edward.....Niagara, Wisconsin
McEachran, Mrs. H. D.....401 East C St., Iron Mountain
Palm, Mrs. Theodore E.....710 Michigan, Crystal Falls
Retallack, Mrs. R. C.....621 W. Genesee, Iron River
Schmutzler, Mrs. W. A.....625 Wilson, Kingsford
Schroeder, Mrs. J. M.....1111 Stockbridge, Iron Mountain
Smith, Mrs. D. R.....817 W. Brown, Iron Mountain
Steinke, Mrs. C. G.....600 Hamilton, Kingsford

EATON COUNTY

Arner, Mrs. Fred L.....702 Capitol, Bellevue
Brown, Mrs. B. Philip.....337 S. Cochran, Charlotte
Carothers, Mrs. Daniel F.....243 S. Sheldon, Charlotte
DeLand, Mrs. C. L.....117 Van Buren, Bellevue
Engle, Mrs. Paul.....Olivet
Goff, Mrs. Sidney B.....Eaton Rapids
Hannah, Mrs. Harry W.....Clinton Trail, Charlotte
Meinke, Mrs. A. H., Jr.....Eaton Rapids
Myers, Mrs. A. W.....Potterville
Sevener, Mrs. Lester G.....608 W. Stoddard, Charlotte
Shockley, Mrs. B. F.....S. Pleasant, Charlotte
Stimson, Mrs. C. A.....722 S. Main, Eaton Rapids
Van Ark, Mrs. Bert.....Eaton Rapids
Van Ark, Mrs. Herman.....Eaton Rapids
Willits, Mrs. C. O.....127 Upland, Charlotte

Adams, Mrs. Burnell.....609 S. Lynch, Flint
Adams, Mrs. Chester.....610 E. Grand Blanc Rd., Grand Blanc
Anderson, Mrs. Harley.....11820 N. Saginaw Rd., Mt. Morris
Anderson, Mrs. John.....6227 River Rd., Flushing
Andrews, Mrs. N. A. C.....310 East Main St., Flushing
Anthony, Mrs. George.....912 Beard, Flint
Backus, Mrs. Glenn.....3131 Westwood Parkway, Flint
Baird, Mrs. W. C.....1818 Ramsay Blvd., Flint
Barbour, Mrs. Fleming.....2015 Lincoln Dr., Flint
Baske, Mrs. Franklin.....923 Maxine, Flint
Bateman, Mrs. L. G.....1708 E. Second, Flint
Benson, Mrs. John, Jr.....1410 E. Court, Flint
Berman, Mrs. Harry.....927 Beard St., Flint
Bernstein, Mrs. Eli.....3211 Westwood Pkway, Flint
Beyer, Mrs. George.....Clio
Bird, Mrs. W. G.....133 Odette, Flint
Bishop, Mrs. D. L.....422 Grace, Flint
Bogart, Mrs. Leon.....1125 South Drive, Flint
Boles, Mrs. William.....1407 Woodcroft, Flint
Bonathan, Mrs. A. T.....3002 Parkside Dr., Flint
Branch, Mrs. Hira.....1014 Woodside, Flint
Brasie, Mrs. Donald.....310 Josephine, Flint
Brisbois, Mrs. Harold.....43 Kra 'Nur Dr., Davison
Bruce, Mrs. William.....5397 Miller Rd., Swartz Creek
Bryant, Mrs. Donald.....405 W. Witherbee, Flint
Buchanan, Mrs. William.....902 S. Leroy, Fenton
Chambers, Mrs. Myrton....3402 Westwood Parkway, Flint
Chase, Mrs. Wm.....1318 N. Ballenger Rd., Flint
Clark, Mrs. Robert.....2602 Thomas, Flint
Collins, Mrs. James.....902 Stockdale, Flint
Colwell, Mrs. Clifford W.....2038 Crooked Lane, Flint
Connell, Mrs. J. T.....Coldwater Road, RR No. 1, Flint
Conover, Mrs. George.....G-1152 N. Dye Rd., Flint
Conover, Mrs. McClellan.....724 East St., Flint
Conover, Mrs. T. S.....G-4349 Fenton Rd., Flint
Credille, Mrs. Barney.....2020 E. Second, Flint
Curry, Mrs. George.....3021 Westwood Parkway, Flint
Curtin, Mrs. John.....2901 Westwood Pk., Flint
Cutler, Mrs. Campbell.....1502 Lavender, Flint
Dawson, Mrs. Ralph.....1617 Linwood Ave., Flint
Davis, Mrs. Robert C.....407 Fremont, Flint
Del-Zingro, Mrs. Nicholas.....Davison
Dickstein, Mrs. Bernard.....1010 W. Hamilton, Flint
Dimond, Mrs. E. G.....G-5046 McCandlish Rd., Grand Blanc
Dodds, Mrs. Fred.....1291 Kearsley Park Blvd., Flint
Dodds, Mrs. Max.....708 Fremont, Flint
Dorsey, Mrs. Philip.....6942 Flushing Rd., Flushing
Drewyer, Mrs. Glenn....5237 W. Reid Rd., Swartz Creek
Eichhorn, Mrs. Ernest.....1301 Riverdale Rd., Flint
Eickhorst, Mrs. Thomas.....951 Welch Blvd., Flint
Elliott, Mrs. H. B.....2380 Nolen Dr., Flint
Engleman, Mrs. Ralph.....(In Military Service)
Farhat, Mrs. Maynard.....1901 Hampden Rd., Flint
Fee, Mrs. Manson.....2721 Clement, Flint
Ferris, Mrs. James.....426 State St., Davison
Finkelstein, Mrs. Theodore.....1633 Seminole St., Flint
Flynn, Mrs. Southard.....2354 Nolen Dr., Flint
Gelenger, Mrs. S. M.....2125 Detroit St., Flint
Gleason, Mrs. N. A.....1309 Blanchard, Flint
Golden, Mrs. H. M.....1511 Woodcroft, Flint
Gorne, Mrs. S. S.....1009 Woodside Dr., Flint
Grady, Mrs. Donald.....1515 Woodslea, Flint
Griffin, Mrs. Ernest, Jr.....1505 Arrow Lane, Flint
Grover, Mrs. H. F.....3509 Norwood Dr., Flint
Guile, Mrs. Gurdon.....1621 Dupont, Flint
Gundry, Mrs. G.....11,736 S. Saginaw Rd., Grand Blanc
Gutow, Mrs. I. H.....3020 Westwood Parkway, Flint
Gutow, Mrs. J. J.....3759 Sunset Drive, Flint
Hackley, Mrs. Richard.....422 Grace St., Flint
Hague, Mrs. Robert.....8231 River Rd., Flushing
Hamilton, Mrs. A. J.....14,292 Darts Landing, Fenton
Harper, Mrs. A. W.....712 Thomson St., Flint
Harper, Mrs. Homer.....713 Thomson St., Flint
Hing, Mrs. Wm.....326 Stockdale St., Flint
Hiscock, Mrs. Harold.....2021 Briar Hill, Flint
Hooper, Mrs. Kendall.....348 Bradley, Flint
Hubbard, Mrs. Wm.....1205 Maxine, Flint
Hufton, Mrs. W. L.....2546 Nolen Dr., Flint
Jermstad, Mrs. Robert.....623 Third Ave., Flint
Johnson, Mrs. Frank.....235 Hamilton, Flint
Johnson, Mrs. R.....5173 W. Reid Rd., Swartz Creek
Judd, Mrs. Alvin.....8 Kra 'Mur Dr., Davison
Kaleta, Mrs. Edward.....2216 Pierce St., Flint
Kaufman, Mrs. Lewis.....1617 Neome Drive, Flint
Knapp, Mrs. Don.....712 Mann Ave., Flint
Knapp, Mrs. Wm.....921 E. Ninth St., Flint
Kretchmar, Mrs. Arthur.....1135 Dye Rd., Flint
Kurtz, Mrs. John J.....G-2391 Reed Rd., Flint
Limbach, Mrs. David.....308 W. Shiawassee, Fenton
Livesay, Mrs. Jackson.....702 Blanchard St., Flint
Lyttle, Mrs. Sydney.....2442 Thomas St., Flint
MacGregor, Mrs. Delbert....722 W. Hamilton Ave., Flint
Macksood, Mrs. Joseph.....3340 Parkside Dr., Flint
Marshall, Mrs. Sophie.....Olympia, Washington
McLeod, Mrs. Kenneth.....1001 Welch Blvd., Flint
McTaggart, Mrs. David.....2401 Windemore, Flint
Michaels, Mrs. Robt.....409 N. McKinley Rd., Flushing
Miltich, Mrs. Anthony.....2222 Colfax, Flint
Miner, Mrs. F. B.....1000 E. Seventh St., Flint
Moore, Mrs. Kenneth.....2317 Circle Dr., Flint
Morrison, Mrs. William.....205 Perry Rd., Grand Blanc
Morrissey, Mrs. Vaughn.....101 Stockdale, Flint
Mosier, Mrs. Edward.....1730 Overhill Dr., Flint
Murphy, Mrs. Grant.....1201 Kensington, Flint
Neiswander, Mrs. Paul.....2552 Thomas, Flint
Odle, Mrs. Ira.....201 Welch Blvd., Flint
Orr, Mrs. Walter.....13396 Enid Blvd., Fenton
Osher, Mrs. Seymour.....915 E. Court, Flint
Pfeifer, Mrs. A. C.....12,205 N. Saginaw Rd., Mt. Morris
Phillips, Mrs. Robert.....2613 Thomas, Flint
Preston, Mrs. Otto.....1312 Maxine, Flint
Purcell, Mrs. Francis.....State St., Goodrich
Rapport, Mrs. Richard.....2306 Miller Rd., Flint
Rawlings, Mrs. J. Mott.....1601 Neome Dr., Flint
Reeder, Mrs. F. E.....916 Garland, Flint
Richeson, Mrs. V. N.....702 W. Hamilton, Flint
Rieth, Mrs. George F.....G-6452 Davison Rd., Flint
Rowe, Mrs. John.....1601 Lyon, Flint
Rulney, Mrs. Max.....323 Ferndale Pl., Flint
Rundles, Mrs. Walter.....G-6573 Flushing Rd., Flushing
Rundles, Mrs. W. Z., Jr.....607 Rome Court, Flint
Sandberg, Mrs. Russell.....230 W. Genesee, Flint
Sandy, Mrs. Kenneth.....2701 Detroit, Flint
Scavarda, Mrs. Charles.....2101 E. Court, Flint
Schiff, Mrs. Benton.....3040 Parkside Dr., Flint
Schultz, Mrs. J. S.....3327 Fleming Rd., Flint
Schwartz, Mrs. John.....2920 Dupont St., Flint
Shantz, Mrs. Layton.....2026 Calumet, Flint
Sheeran, Mrs. Dan.....610 S. Vernon, Flint
Shipman, Mrs. Charles.....325 E. First St., Flint
Simoni, Mrs. Lewis.....4001 Circle Dr., Flint
Sirna, Mrs. Anthony.....2709 Thomas, Flint
Smith, Mrs. D. C.....811 Thompson, Flint
Smith, Mrs. E. C.....565 Welch, Flint
Smith, Mrs. M. J.....422 Odette, Flint
Sniderman, Mrs. Ben.....3738 Norwood, Flint
Sorkin, Mrs. Sam.....1919 Miller Rd., Flint
Sparks, Mrs. Harvey.....2749 Thomas, Flint
Steffe, Mrs. Ralph.....1617 Brookwood, Flint
Steinman, Mrs. Floyd.....2418 Nolen Dr., Flint
Stevenson, Mrs. Wm.....1901 Ramsay, Flint
Stevens, Mrs. Philip K.....468 Commonwealth, Flint
Stroup, Mrs. Clayton.....G-5208 E. Court, Flint
Swartzendruber, Mrs. Fred.....Goodrich
Thompson, Mrs. Alvin.....1607 Cromwell, Flint
Thompson, Mrs. Jack.....3031 Westwood Parkway, Flint
Tofteland, Mrs. Elmer.....2430 Nolen Dr., Flint

Tuuri, Mrs. Arthur.....1707 Greenway, Flint
Van Harn, Mrs. Ray.....3102 Westwood Parkway, Flint
Varney, Mrs. Howard.....(In Military Service)
Vary, Mrs. Edwin.....2472 Nolen Dr., Flint
Wark, Mrs. D. R.....1315 Detroit, Flint
Ware, Mrs. Frank.....902 Woodside Dr., Flint
Wentworth, Mrs. John.....1651 Chevrolet Ave., Flint
White, Mrs. Herbert.....1620 Mason, Flint
Williams, Mrs. Wm.....5216 S. Genesee Rd., Grand Blanc
Willoughby, Mrs. Gordon.....5013 N. Saginaw, Flint
Willoughby, Mrs. L. L.....1017 Woodlawn, Flint
Wills, Mrs. T. W.....608 Welch, Flint
Winchester, Mrs. Walter.....801 E. Ninth St., Flint
Woughter, Mrs. Harold.....2123 Radcliff, Flint
Wright, Mrs. Don R.....403 W. Court St., Flint

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Beall, Mrs. J. G.....425 Sixth St., Traverse City
Behan, Mrs. Gerald.....512 Fifth St., Traverse City
Bolan, Mrs. E. J.....Sutton's Bay
Brownson, Mrs. J. J.....Kingsley
Brownson, Mrs. K. M.....Peninsula Dr., Traverse City
Bushong, Mrs. B. B.....515 Elmwood, Traverse City
Carrow, Mrs. Fleming.....RFD No. 5, Traverse City
Clarke, Mrs. Charles D.....Peninsula Dr., Traverse City
Duiker, Mrs. Henry.....Box C, Traverse City
Ellis, Mrs. Claude.....Sutton's Bay
Gallagher, Mrs. Wm.....Box C, Traverse City
Haberlein, Mrs. Charles.....701 Monroe, Traverse City
Hamilton, Mrs. E. E.....Ahgosa, Traverse City
Huene, Mrs. Nevin.....506 State St., Traverse City
Kyselka, Mrs. Harry.....E. Long Lake, Traverse City
Lawton, Mrs. F. P.....504 West 7th St., Traverse City
Lossman, Mrs. Robert.....Deepwater Point RFD, Traverse City
Miller, Mrs. Chas.....Box C Traverse City
Milliken, Mrs. John.....Peninsula Dr., Traverse City
Murphy, Mrs. Fred.....704 Emmons St., Traverse City
Nickels, Mrs. M. M.....Box C, Traverse City
Noyes, Mrs. Guy.....Park Place Hotel, Traverse City
Osterlin, Mrs. Mark.....Peninsula Dr., Traverse City
Pike, Mrs. D. G.....E. Bay Shore Dr., Traverse City
Power, Mrs. Frank.....521 Sixth St., Traverse City
Salon, Mrs. Dayton.....334 W. 11th, Traverse City
Sladek, Mrs. E. F.....224 Seventh St., Traverse City
Thirlby, Mrs. E. L.....520 Sixth St., Traverse City
Thirlby, Mrs. Richard....1315 Wayne St., Traverse City
Weitz, Mrs. Harry.....529 Monroe Ave., Traverse City
Weih, Mrs. Jack.....U.S. 31 North, Traverse City
Wilcox, Mrs. Paul H.....526 W. 10th, Traverse City
Zielke, Mrs. I. H.....318 Wellington, Traverse City
Zimmerman, Mrs. J. G.....606 N. Elmwood, Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Barstow, Mrs. Don K.....St. Louis
Barstow, Mrs. W. E.....St. Louis
Becker, Mrs. M. G.....Edmore
Bedo, Mrs. A. V.....906 S. Franklin, Mt. Pleasant
Bergin, Mrs. J. H.....1437 Michigan, Alma
Chamberlain, Mrs. R. W.....610 College, Mt. Pleasant
Davis, Mrs. L. L.....314 S. Brown, Mt. Pleasant
Dubois, Mrs. Chas. F.....706 State, Alma
Eldredge, Mrs. J.....Mayer St., Alma
Graham, Mrs. B. J.....706 River, Alma
Hall, Mrs. Robert.....805 Douglas, Mt. Pleasant
Hammerburg, Mrs. Kuno.....622 McEwen, Clare
Harrigan, Mrs. W. L.....408 E. Broadway, Mt. Pleasant
Hobbs, Mrs. A. D.....St. Louis
Hoogerland, Mrs. C. L.....514 Iowa, Alma
Juhnke, Mrs. L. W.....Maple St., Mt. Pleasant
McArthur, Mrs. Stewart C.....Rosebush
Oldham, Mrs. E. S.....Breckenridge
Palmer, Mrs. Fred.....Box 32, Mt. Pleasant
Ringer, Mrs. P.....c/o Davis Clinic, Mt. Pleasant
Rottschafer, Mrs. J. L.....715 W. Center St., Alma
Strange, Mrs. Russell H.....Fowler Orchard R.R., Clare
Wallman, Mrs. C. H.....901 State St., Alma
Wolfe, Mrs. K. P.....RFD, Alma

HILLSDALE COUNTY

Davis, Mrs. L. A.....Camden
Day, Mrs. Luther.....Jonesville
Hodge, Mrs. C. L.....Reading
Mac Neal, Mrs. John A.....76 N. Manning St., Hillsdale
Mattson, Mrs. H. F.....32 S. Broad St., Hillsdale
Michel, Mrs. Wm. O.....39 North St., Hillsdale
Sawyer, Mrs. W. W.....61 N. Howell St., Hillsdale
Trapp, Mrs. Donald G. .....32 S. Broad St., Hillsdale

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, Mrs. A. B.....325 Harris Ave., Hancock
Aldrich, Mrs. A. D.....U.S. 41, Chassell
Aldrich, Mrs. L. C.....1609 E. Houghton, Houghton
Brewington, Mrs. G. F.....Mohawk
Burke, Mrs. J. J.....Hubbell
Hillmer, Mrs. R. E.....1 Algomah, Painesdale
Hosking, Mrs. Frederick.....328 Florida, Laurium
Janis, Mrs. Anton.....Harris Ave., Hancock
King, Mrs. Sidney.....218 Harris Ave., Hancock
Kolb, Mrs. F. E.....128 Calumet St., Calumet
LaBine, Mrs. Alfred.....1019 College Ave., Houghton
Lepisto, Mrs. Victor.....102 S. Iroquois, Laurium
Larson, Mrs. Forrest.....1400 E. Houghton, Houghton
Levine, Mrs. Simon.....1209 College Ave., Houghton
Lund, Mrs. Chester.....Lake Linden
Manthei, Mrs. W. A.....5426 Calumet, Lake Linden
Murphy, Mrs. P. J.....130 Calumet, Calumet
Potter, Mrs. Earl.....L'Anse
Repola, Mrs. K. L.....338 S. Iroquois, Laurium
Roche, Mrs. Jessie.....242 Iroquois, Laurium
Roche, Mrs. A. M.....204 Pewabic, Laurium
Rupprecht, Mrs. Lee.....117 Fifth St., Calumet
Sloan, Mrs. P. S.....214 Clark St., Houghton
Smith, Mrs. Chas.....E. White St., Hancock
Stern, Mrs. I. D.....220 Hubbell, Houghton
Wickliffe, Mrs. T. P.....1167 Calumet Ave., Calumet
Winkler, Mrs. H. J.....L'Anse

HURON COUNTY

Dixon, Mrs. Ralph.....Pigeon
Gettel, Mrs. Roy.....634 W. Huron Dr., Bad Axe
Herrington, Mrs. Willet.....120 N. Hanselman, Bad Axe
Oakes, Mrs. C. W.....Box 26, Harbor Beach
Ritsema, Mrs. John.....Sebewaing
Scheurer, Mrs. Clare .....Pigeon
Steinhardt, Mrs. Edward.....Elkton
Turner, Mrs. Phillip.....Harbor Beach
Wible, Mrs. Charles.....Sebewaing

Alexander, Mrs. Reuben G.....Laingsburg
Altland, Mrs. John K.....Route No. 3, W. Mt. Hope Rd., Lansing
Asselin, Mrs. David.....1001 Glenhaven, East Lansing
Badgley, Mrs. W. O.....1523 W. Ionia St., Lansing
Bates, Mrs. Richard C.....326 Northlawn, East Lansing
Bauer, Mrs. T. I.....839 Wildwood Dr., East Lansing
Beaubien, Mrs. M. S.....211 Milford, East Lansing
Bevez, Mrs. Frank L.....1322 Cooper Ave., Lansing
Bowersox, Mrs. R. J.....627 Whitehills Dr., East Lansing
Breakey, Mrs. Robert.....520 Westmoreland, Lansing
Bradford, Mrs. C. W.....832 Westlawn St., East Lansing
Brown, Mrs. F. W., Jr.....706 Britten, Lansing
Brubaker, Mrs. Earl.....404 S. Jenison, Lansing
Bruckcr, Mrs. K. B.....610 S. Walnut, Lansing
Burnette, Mrs. Claude.....401 Greenlawn, Lansing
Calomeni, Mrs. A. D.....1523 W. Michigan Ave., Lansing
Cameron, Mrs. W. J.....920 N. Capitol, Lansing
Carr, Mrs. E. I.....1915 Moores River Dr., Lansing
Cheney, Mrs. W. D.....Rt. No. 2, Okemos
Christian, Mrs. L. G.....400 Everett Dr., Lansing
Clark, Mrs. W. E.....809 Ash St., Mason
Cook, Mrs. Robert J.....105 S. Jenison, Lansing
Cope, Mrs. H. E.....605 Westmoreland, Lansing
Cordes, Mrs. Jerome F.....2290 Shawnee Trail, Okemos
Cowan, Mrs. John A.....825 Touraine, East Lansing
Crandall, Mrs. Clarence.....1964 S. Cedar, Holt
Cross, Mrs. F. S.....432 Highland, East Lansing
Cushman, Mrs. F. J.....408 N. Sycamore, Lansing
Darling, Mrs. L. H.....431 S. Verlinden Ave., Lansing
Dean, Mrs. Carleton....152 Maplewood Dr., East Lansing
Davenport, Mrs. C. S.....c/o 520 Westmoreland Ave., Lansing
DeVries, Mrs. C. F.....Delta River Rd., Lansing
Doyle, Mrs. C. P.....215 N. Logan, Lansing
Drolett, Mrs. L. A.....228 S. Jenison, Lansing
Drolett, Mrs. F. C.....1623 Inverness, Lansing
Drolett, Mrs. Don.....2408 Arlington Rd., Lansing
Dunn, Mrs. F. M.....614 Whitehills Dr., East Lansing
Feeney, Mrs. Kenneth J.....822 Durant, Lansing
Finch, Mrs. R. L.....420 S. Walnut, Lansing
Folkers, Mrs. L. M.....991 Rosewood Ave., East Lansing
Fortino, Mrs. S. P.....444 West St., Lansing
Fosget, Mrs. Wilbur.....210 E. Hillsdale, Lansing
Freeland, Mrs. Orrin.....602 N. Hogsback Rd., Mason
French, Mrs. H. L.....Delta River Rd., Lansing
Gardner, Mrs. C. B.....1815 Moores River Rd., Lansing
Garlinghouse, Mrs. A. J.....(In Military Service)
Goldner, Mrs. R. E.....744 Verlinden Ave., Lansing
Harris, Mrs. H. W.....2535 Clifton, Lansing
Harrison, Mrs. Wm. H.....1306 Hyland, Lansing
Harrold, Mrs. J. F.....1713 Osborn Rd., Lansing
Hart, Mrs. Lloyd C.....119 W. Lenawee, Lansing
Hayes, Mrs. Robert E.....1020 Britten, Lansing
Hayford, Mrs. W. D.....1006 Wildwood Dr., East Lansing
Haze, Mrs. H. A.....Hotel Olds, Lansing
Heald, Mrs. Gordon....345 Whitehills Dr., East Lansing
Heckert, Mrs. F. B.....Delta River Rd., Lansing
Heckert, Mrs. J. K.....E. Grand River, East Lansing
Hermes, Mrs. Edward J.....604 W. Willow, Lansing
Heustis, Mrs. A. E.....410 Cowley Ave., East Lansing
Himmelberger, Mrs. R. J.....227 West, Lansing
Hodges, Mrs. Kenneth.....1703 Osborn Rd., Lansing
Holland, Mrs. Charles F.....166 Orchard, East Lansing
Holm, Mrs. M. L.....913 W. Allegan, Lansing
Huggett, Mrs. C. C.....1531 Osborn, Lansing
Hurdt, Mrs. Mark.....2195 Kent, Okemos
Hunt, Mrs. O. Raymond.....707 Tisdale, Lansing
Imthum, Mrs. Edgar.....Grand Ledge
Isbister, Mrs. J. L.....104 S. Jenison, Lansing
Jacob, Mrs. S. S.....1044 Wildwood Dr., East Lansing
Johnson, Mrs. David B.....1426 Sherwood, East Lansing
Johnson, Mrs. K. H.....1539 Spencer, Lansing
Johnson, Mrs. H. T.....817 N. Foster, Lansing
Jones, Mrs. F. A., Jr.....1025 Roxburgh Rd., East Lansing
June, Mrs. R. C.....Eastfield Rd., Lansing
Kahn, Mrs. David.....1519 Pershing Ave., Lansing
Kalmbach, Mrs. R. E.....927 Verlinden, Lansing
Kiefer, Mrs. Guy L.....834 Rosewood, East Lansing
Klunzinger, Mrs. W. ....810 Roxburgh Rd., East Lansing
Landy, Mrs. G. R.....1023 North Jenison, Lansing
Lange, Mrs. Philip F.....1510 Sunnyside, Lansing
Laughead, Mrs. C. A.....407 Clarendon Rd., East Lansing
LeDuc, Mrs. Don .....405 University Dr., East Lansing
Le Vett, Mrs. Harry L.....431 Kedsie Dr., East Lansing
Loree, Mrs. M. C.....609 West St., Lansing
Lucas, Mrs. T. Alexander.....2629 Criston Ave., Lansing
Ludlum, Mrs. L. C.....1126 W. Saginaw, Lansing
Marriner, Mrs. Ellsworth F.....2065 N.E. Delhi, Holt
Martin, Mrs. Wayne.....4765 Nakoma Dr., Okemos
McCorvie, Mrs. C. R.....12A Hillcrest Vill., East Lansing
McCrumb, Mrs. R. R.....1216 Parkdale, Lansing
McGillicuddy, Mrs. J. E.....924 W. Ottawa St., Lansing
McGillicuddy, Mrs. O. B...820 Roxburgh Rd., E. Lansing
McGillicuddy, Mrs. R.....528 E. Oakwood Dr., E. Lansing
McIntyre, Mrs. J. E.....600 S. Grand Ave., Lansing
McNamara, Mrs. B. Edward....804 W. Ottawa, Lansing
Meade, Mrs. William.....535 Ardson Rd., East Lansing
Meade, Mrs. Robert J.....520 Ann St., East Lansing
Menzies, Mrs. Clifford.....734 Linden St., East Lansing
Mercer, Mrs. W. E.....909 Glenhaven, East Lansing
Miller, Mrs. H. A.....417 N. Jenison, Lansing
Morrow, Mrs. R. J.....411 W. Ottawa St., Lansing
Neering, Mrs. James.....517 Carey, Lansing
Ochsner, Mrs. P. J.....515 West St., Lansing
Osborn, Mrs. S.....528 W. Ottawa, Lansing
Paine, Mrs. Wm. G.....724 Rosewood Ave., East Lansing
Parker, Mrs. Earl E.....207 E. Bellevue, Leslie
Philips, Mrs. David.....715 W. Washtenaw, Lansing
Pinkham, Mrs. R. A.....535 N. Capital Ave., Lansing
Place, Mrs. E. H.....2695 Eaton Rapids Rd., Lansing
Plesscher, Mrs. W. H.....6293 Reynolds Rd., E. Lansing
Pomeroy, Mrs. Richard.....504 Division, East Lansing
Prall, Mrs. H. J.....214 W. Main, Lansing
Randall, Mrs. O. M.....1805 Moores River Dr., Lansing
Richards, Mrs. Frank....311 Kensington Rd., East Lansing
Robson, Mrs. E. J.....728 Audubon Rd., East Lansing
Rozan, Mrs. J. S.....4702 Woodcraft Drive, Okemos
Ruhmkorff, Mrs. Ralph H.....1060 Glenhaven, E. Lansing
Russell, Mrs. Claude V.....3813 W. Willow, Lansing
Rutledge, Mrs. Samuel....1035 Northlawn, East Lansing
Sander, Mrs. John.....4275 Dobie Rd., Okemus
Shapiro, Mrs. Hyman D.....615 S. Capitol, Lansing
Sharp, Mrs. Mahlon S.....950 Audubon Rd., East Lansing
Shaw, Mrs. Milton.....415 West St., Lansing
Sherman, Mrs. George.....504 Cowley, East Lansing
Shultz, Mrs. Arthur.....4646 Ottawa Dr., Okemus
Sichler, Mrs. Harper.....443 Clifton Blvd., East Lansing
Silverman, Mrs. I. E.....1602 Clifton, Lansing
Sleight, Mrs. Justin.....1426 W. Vine St., Lansing
Snell, Mrs. Dana M.....312 N. Harrison Rd., East Lansing
Snyder, Mrs. LeMoyne....727 Audubon Rd., East Lansing
Spagnuolo, Mrs. A. J.....2304 Marion Ave., Lansing
Spencer, Mrs. Charles T.....1134 Southlawn, East Lansing
Spencer, Mrs. P. C.....602 Northlawn, East Lansing
Stanka, Mrs. A. G.....360 W. Jefferson, Grand Ledge
Stanley, Mrs. A. L.....408 Whitehills Dr., East Lansing
Steiner, Mrs. S. D.....413 Clarendon St., East Lansing
Stiles, Mrs. Frank.....615 Northlawn, East Lansing
Stilwell, Mrs. George D.....518 Sunrise Ct., East Lansing
Stimson, Mrs. Paul R.....1841 Clark, Lansing
Stow, Mrs. Robert.....1063 Rosewood, East Lansing
Strauss, Mrs. P. C.....1514 Osborn Rd., Lansing
Stringer, Mrs. C. J.....1701 W. Kalamazoo St., Lansing
Summers, Mrs. John E.....2707 S. Washington, Lansing
Sundell, Mrs. Edwin C.....338 Marshall, East Lansing
Swartz, Mrs. F. C.....500 Kedzie Dr., East Lansing
Tamblyn, Mrs. F. W.....Waverly Rd., R. 3, Lansing
Toothaker, Mrs. K. W...1609 W. Michigan Ave., Lansing
Trescott, Mrs. R. F.....218 Chesterfield Pkwy., Lansing

Trimby, Mrs. Robert.....850 N. Foster, Lansing
Troost, Mrs. F. L.....4395 W. Delhi, Holt
VanderZalm, Mrs. T. P.....1452 Cambridge Rd., Lansing
Venier, Mrs. J. H.....812 Sparrow Ave., Lansing
Wadley, Mrs. Ralph.....930 Roxburgh, East Lansing
Walker, Mrs. L.....1652 Sunnyside, Lansing
Warford, Mrs. J. T.....215 S. Butler, Lansing
Webb, Mrs. Roy.....
2176 Hamilton Rd., Box No. 3, Okemos
Weinburg, Mrs. H. B.....520 Butterfield, East Lansing
Weliman, Mrs. John.....1809 W. Hillsdale, Lansing
Wilensky, Mrs. T.....527 W. Oakwood Dr., E. Lansing
Wiley, Mrs. H. W.....402 N. Jenison, Lansing
Willson, Mrs. Howard.....435 McPherson St., Lansing
Wilson, Mrs. Harry A.....222 Strathmore, Lansing
Wolcott, Mrs. Lester E.....4841 Ardmore Rd., Okemos
Worthington, Mrs. R.....717 Britten St., Lansing

IONIA-MONTCALM COUNTIES

Buck, Mrs. Jack.....Jefferson St., Ionia
Campbell, Mrs. Richard.....E. Main St., Ionia
Cook, Mrs. George H.....Ionia State Hospital, Ionia
Cox, Mrs. T. J.....High St., Ionia
Foust, Mrs. Joseph.....Lafayette St., Ionia
Hoffs, Mrs. M. A.....Lake Odessa
Kopchick, Mrs. Joseph.....Muir
Slagh, Mrs. Milton.....Saranac
Smith, Mrs. Robert.....Roseland Terrace, Ionia
Socha, Mrs. Edmund S.....Main St., Ionia
Tannheimer, Mrs. John.....Lovell Pl., Ionia
Trinca, Mrs. P. J.....E. Washington, Ionia

JACKSON COUNTY

Abraham, Mrs. A. O.....Hudson
Adams, Mrs. E. W.....759 Oakridge Dr., Jackson
Ahronheim, Mrs. J. H.....1410 Greenwood Ave., Jackson
Alter, Mrs. R. H.....1805 Kibbe, Jackson
Anderson, Mrs. W. B.....815 Briarcliff Rd., Jackson
Appel, Mrs. S.....808 S. Durand, Jackson
Baker, Mrs. G. M.....Parma
Bartholic, Mrs. F. W.....Homer
Beckwith, Mrs. S. A.....Stockbridge
Brashares, Mrs. Z. A.....Brooklyn
Bullen, Mrs. G. R.....418 Third St., Jackson
Clarke, Mrs. C. S.....1046 Fourth St., Jackson
Cooley, Mrs. R. M.....141 E. Robinson, Jackson
Cooley, Mrs. Charles W.....317 Wisner, Jackson
Corley, Mrs. Cecil.....504 Wildwood, Jackson
Corley, Mrs. E. H.....1211 W. Franklin, Jackson
Corley, Mrs. R. W.....1104 W. Michigan, Jackson
Cox, Mrs. Ferdinand.....1601 Fourth St., Jackson
Culver, Mrs. G. D.....Stockbridge
DeMay, Mrs. C. E.....410 DeMay St., Jackson
DeMay, Mrs. J. D.....1205 Third, Jackson
Deming, Mrs. R. C.....764 Union St., Jackson
Dengler, Mrs. C. R.....504 Third St., Jackson
Dickman, Mrs. H. M.....Hudson
Douglas, Mrs. E. W.....924 Cooper, Jackson
Filip, Mrs. H. K.....755 W. Michigan, Jackson
Finton, Mrs. R. E.....1812 Grovedale, Jackson
Hackett, Mrs. T. E.....1124 Burr St., Jackson
Hackett, Mrs. T. L.....3160 Reynolds Rd., Jackson
Hanft, Mrs. C. F.....Springport
Hardie, Mrs. G. C.....218 Fourth, Jackson
Harris, Mrs. L. J.....607 W. Washington, Jackson
Hicks, Mrs. G. C.....1009 Wildwood Ave., Jackson
Holst, Mrs. J. B.....1437 Wickwire Rd., Jackson
Hurley, Mrs. H.....734 Bloomfield, Jackson
Joerin, Mrs. W. A.....724 Griswold, Jackson
Karr, Mrs. J. P.....844 Woodbine, Jackson
Keefer, Mrs. A. H.....Concord
Kempton, Mrs. George.....748 Crescent Rd., Jackson
Kline, Mrs. Starr.....3525 Jefferson Rd., Jackson
Kraft, Mrs. L. C.....Leslie
Kudner, Mrs. D. F.....1300 W. Franklin, Jackson
Lake, Mrs. Ed.....786 Bloomfield Blvd., Jackson
Lake, Mrs. W. H.....109 S. Elm, Jackson
Landron, Mrs. Daniel.....4633 Page Ave., Jackson
Lathrop, Mrs. W. W.....1201 S. West Ave., Jackson
Leahy, Mrs. E. O.....1826 Grovedale Ave., Jackson
Leonard, Mrs. C. A.....1116 S. Bowen, Jackson
Lenz, Mrs. C. R.....105 S. Wisner, Jackson
Linden, Mrs. V. E.....5712 Browns Lake Rd., Jackson
Lewis, Mrs. E. F.....609 S. Wisner, Jackson
Ludwick, Mrs. J. E.....6220 Brooklyn Rd., Jackson
Ludwick, Mrs. John P.....8921 Matthews Rd., Jackson
McGarvey, Mrs. W. E.....319 S. Higby, Jackson
McLaughlin, Mrs. John.....1609 W. Franklin, Jackson
McLaughlin, Mrs. M. J.....R.F.D. No. 1,
Brown's Lake Rd., Jackson
McLauthlin, Mrs. H. B.....439 Wildwood Ave., Jackson
Meads, Mrs. J. B.....1714 Fourth St., Jackson
Medlar, Mrs. R.....407 S. Wisner, Jackson
Miller, Mrs. J. L.....805 S. Durand, Jackson
Munro, Mrs. C. D.....740 W. Michigan, Jackson
Munro, Mrs. N. D.....407 Edwards, Jackson
Murphy, Mrs. B. M.....729 Oakdale, Jackson
Myers, Mrs. J. H.....1902 Grovedale, Jackson
Newton, Mrs. R. E.....3124 Horton Rd., Jackson
Oleksy, Mrs. S. P.....744 W. Michigan, Jackson
Parker, Mrs. E. E.....Leslie
Payne, Mrs. A. K.....914 S. Brown St., Jackson
Peterson, Mrs. E. S.....504 S. Jackson, Jackson
Phillips, Mrs. George.....106 4th Vandercook Lake,
Jackson
Porter, Mrs. H. W.....1008 Carlton Blvd., Jackson
Pray, Mrs. F. F.....310 Steward Ave., Jackson
Pray, Mrs. G. R.....404 S. Jackson, Jackson
Rice, Mrs. J. W.....705 Bloomfield Blvd., Jackson
Ries, Mrs. R.....110 Sagamore Rd., Jackson
Sargent, Mrs. L. E.....114 N. Thompson, Jackson
Sautter, Mrs. W. A.....Horton
Schepler, Mrs. C. W.....Brooklyn
Schmidt, Mrs. T. E.....1414 W. Washington, Jackson
Schuerer, Mrs. P. A.....Manchester
Scott, Mrs. J. A.....119 S. Bowen, Jackson
Shaeffer, Mrs. A. M.....120 S. Durand, Jackson
Sher, Mrs. D. B.....956 Cooper, Jackson
Sill, Mrs. H. W.....214 S. Durand, Jackson
Smith, Mrs. D. W.....1205 Washington, Jackson
Smith, Mrs. J. C.....108 S. Brown St., Jackson
Stolberg, Mrs. Carl A.....754 Oakridge Dr., Jackson
Stone, Mrs. E. L.....1011 S. Brown St., Jackson
Susskind, Mrs. M. W.....707 Durand, Jackson
Taylor, Mrs. R. V.....800 S. Grinnell, Jackson
Thalner, Mrs. L. F.....609 W. Michigan, Jackson
Thayer, Mrs. E. A.....2018 Spring Arbor Rd., Jackson
Thompson, Mrs. T.....200 Fourth St., Jackson
Torwick, Mrs. E. T.....602 S. Grinnell, Jackson
Townsend, Mrs. J. W.....108 Hague, Vandercook Lake
Van Schoick, Mrs. Frank..1301 Greenwood Ave., Jackson
Van Schoick, Mrs. John.....Hanover
Van Wagnen, Mrs. F. I.....1232 First St., Jackson
Vivirski, Mrs. E. E.....603 S. Elm, Jackson
Wholihan, Mrs. John.....602 W. Michigan, Jackson
Wickham, Mrs. W. A.....1902 Fourth St., Jackson

Aach, Mrs. Hugo.....3232 Bronson Blvd., Kalamazoo
Alexander, Mrs. C. A.....8312 Gull Rd., Kalamazoo
Andrews, Mrs. Sherman..2326 Springhill Dr., Kalamazoo
Appel, Mrs. Ben.....516 Montrose, Kalamazoo
Appel, Mrs. William.....1826 Paddington Rd., Kalamazoo
Balch, Mrs. R. E.....Melbourne, Fla.
Banner, Mrs. L. R.....Hickory Corners
Barak, Mrs. Herbert.....3012 Broadway Ave., Kalamazoo
Barnabee, Mrs. James.....503 S. Burdick, Kalamazoo
Barry, Mrs. Manley.....R.F.D. No. 3, Kalamazoo
Bennett, Mrs. Keith.....2338 Tipperary Rd., Kalamazoo
Betz, Mrs. Eldean.....1521 Timberlane Dr., Kalamazoo
Borgman, Mrs. Wallace.....106 Thompson, Kalamazoo
Boys, Mrs. C. E.....145 Prospect, Kalamazoo
Breneman, Mrs. James.....25 Pearl St., Galesburg
Brown, Mrs. I. W.....1628 Cambridge Rd., Kalamazoo
Burbidge, Mrs. Earl.....359 Park Ave., Parchment
Burrell, Mrs. Robert.....1104 Fletcher, Kalamazoo
Callander, Mrs. C. G.....220 Bronson Medical Center, Kalamazoo
Chrest, Mrs. C. P.....2740 Bronson Blvd., Kalamazoo
Cobb, Mrs. H. R.....3403 Knox Ave., Kalamazoo
Conrad, Mrs. Maynard..1509 Timberlane Dr., Kalamazoo
Collins, Mrs. W. E.....447 W. Walnut, Kalamazoo
Cook, Mrs. R. G.....615 Clinton, Kalamazoo
Cooper, Mrs. Paul.....4326 Oakland Dr., Kalamazoo
Crane, Mrs. Bart.....420 S. Rose, Kalamazoo
Crawford, Mrs. Kenneth.....1532 Grand Ave., Kalamazoo
Creager, Mrs. R. C.....907 Wheaton, Kalamazoo
Cretsinger, Mrs. Francis.....2012 Chevy Chase Blvd, Kalamazoo
Crum, Mrs. Leo.....Galesburg
Currier, Mrs. K.....1223 Kilgore Rd., Kalamazoo
Dana, Mrs. Robert.....2240 Sheffield Dr., Kalamazoo
DeGroat, Mrs. A. F.....406 Fairfax, Kalamazoo
Delbert, Mrs. Stewart G.....410 Edgemoor, Kalamazoo
DeLong, Mrs. Robert....110 W. Crescent Dr., Kalamazoo
DenBlyker, Mrs. Walter.....513 S. Burdick, Kalamazoo
DePree, Mrs. H. E.....708 Whites Rd., Kalamazoo
Dew, Mrs. Robert.....2253 Sheffield Dr., Kalamazoo
DeWitt, Mrs. Leslie.....1417 Academy, Kalamazoo
DeWitt, Mrs. Norman.....161 S. Prospect St., Kalamazoo
Dick, Mrs. Leo.....428 Stuart, Kalamazoo
Doezema, Mrs. Edward.....802 Grand Pre, Kalamazoo
Dowd, Mrs. Bennard.....1415 Henderson Dr., Kalamazoo
Doyle, Mrs. Fred.....3240 Bronson Blvd., Kalamazoo
Estill, Mrs. Don.....1605 N. Church St., Kalamazoo
Fast, Mrs. Ralph.....1425 Low Rd., Kalamazoo
Fath, Mrs. August.....5029 Angling Rd., Kalamazoo
Finton, Mrs. Max.....1418 Kilgore Rd., Kalamazoo
Fopeano, Mrs. John.....2121 Sheffield Dr., Kalamazoo
French, Mrs. Merle.....1128 Miles Ave., Kalamazoo
Fulkerson, Mrs. C. B.....1535 Grand Ave., Kalamazoo
Fuller, Mrs. Paul.....115 Carmel, Kalamazoo
Fuller, Mrs. R. I.....618 W. Lovell, Kalamazoo
Gerstner, Mrs. Louis.....2425 Law, Kalamazoo
Grant, Mrs. F. E.....214 Douglas, Kalamazoo
Green, Mrs. William.....2622 Alta Vista, Kalamazoo
Gregg, Mrs. Sherman.....234 S. Park, Kalamazoo
Grekin, Mrs. Robert.....1522 Southern, Kalamazoo
Haddock, Mrs. D. A.....430 Creston, Kalamazoo
Hammer, Mrs. John.....121 Monroe, Kalamazoo
Hanson, Mrs. Curtis.....1207 Maple, Kalamazoo
Harrelson, Mrs. William.....3625 Old Colony Rd., Kalamazoo
Hayner, Mrs. Russell.....1404 Cambridge Dr., Kalamazoo
Heersma, Mrs. H. S.....1924 Winchell, Kalamazoo
Herbert, Mrs. Walter.....2777 Highland Park, Richland
Hersey, Dr. Margaret.....4407 Bronson Blvd., Kalamazoo
Hildreth, Mrs. Roscoe.....226 Grandview, Kalamazoo
Hodgman, Mrs. A. B.....1601 Grand Ave., Kalamazoo
Hoebeke, Mrs. W. G.....1408 Long Rd., Kalamazoo
Holder, Mrs. C. O.....Box A, State Hospital, Kalamazoo
Howard, Mrs. Grant.....1329 Maple, Kalamazoo
Hubbell, Mrs. R. J.....3538 Bronson Blvd., Kalamazoo
Irwin, Mrs. William.....2333 Sheffield Dr., Kalamazoo
Jackson, Mrs. Howard.....1224 Hillcrest, Kalamazoo
Jennings, Mrs. Robert.....814 Oakland Dr., Kalamazoo
Jennings, Mrs. W. O.....1136 Long Rd., Kalamazoo
Kavanough, Mrs. William....1412 Vale View, Kalamazoo
Kilgore, Mrs. Robert....5140 Morningside Dr., Kalamazoo
Klerk, Mrs. William.....2421 Waite, Kalamazoo
Koestner, Mrs. Paul.....742 Norton Dr., Kalamazoo
Lavender, Mrs. Howard.....605 Norton Dr., Kalamazoo
Lawrence, Mrs. James....1409 Henderson Dr., Kalamazoo
Locklin, Mrs. Kaye.....4444 Lake Forest Dr., Kalamazoo
Loynd, Mrs. James.....4041 Hillandale, Kalamazoo
MacDonald, Mrs. M. S.....Augusta
MacGregor, Mrs. John.....226 Church, Parchment
Machin, Mrs. Harold.....2348 Tipperary Rd., Kalamazoo
Malone, Mrs. James.....3809 Bronson Blvd., Kalamazoo
Margolis, Mrs. Fred.....2134 Waite Ave., Kalamazoo
Marshall, Mrs. Don.....2344 Sheffield Dr., Kalamazoo
Marshall, Mrs. William.....160 Edgemoor, Kalamazoo
Martens, Mrs. Irvin.....1305 Waverly, Kalamazoo
May, Mrs. Donald.....1327 Maple, Kalamazoo
McCarthy, Mrs. J. S.....State Hospital, Kalamazoo
Moe, Mrs. Rex.....4015 Hillandale Dr., Kalamazoo
Morter, Mrs. R. A.....2421 Sheffield, Kalamazoo
Nibbelink, Mrs. Benjamin....6838 N. 25th St., Kalamazoo
Nook, Mrs. E. J.....2327 Sheffield Dr., Kalamazoo
Overbey, Jr., Mrs. Charles.....Kal. State Hospital, Kalamazoo
Patmos, Mrs. Martin.....1207 Cherry, Kalamazoo
Pearson, Mrs. Edwin.....1026 Dwillard Dr., Kalamazoo
Peelen, Mrs. Matthew.....156 Monroe, Kalamazoo
Peelen, Mrs. William.....934 W. Inkster, Kalamazoo
Perry, Mrs. C. W.....2030 Waite, Kalamazoo
Pullon, Mrs. Alton.....3114 Bronson Blvd., Kalamazoo
Rasmussen, Mrs. Leo.....205 N. Michigan, Vicksburg
Rigterink, Mrs. Gerald.....2424 S. Park, Kalamazoo
Roberts, Mrs. M. S.....118 Bulkley, Kalamazoo
Rockwell, Mrs. Donald.....1227 Jefferson, Kalamazoo
Rogers, Mrs. R. J.....108 Mill St., Vicksburg
Ryan, Mrs. F. P.....2511 Glenwood Dr., Kalamazoo
Scholten, Mrs. Roger.....930 W. Inkster, Kalamazoo
Schrier, Mrs. C. M.....Kalamazoo State Hospital, Kalamazoo
Scott, Mrs. William.....R.R. No. 7, Box 486, Kalamazoo
Shackleton, Mrs. W. E.....Gull Lake, Richland
Shepard, Mrs. B. A.....416 Park Pl., Kalamazoo
Shook, Mrs. Ralph.....2211 Benjamin, Kalamazoo
Siemsen, Mrs. W. J.....1009 Roseland, Kalamazoo
Sisk, Mrs. W. M.....2421 Outlook, Kalamazoo
Slatmeyer, Mrs. Karel.....118 S. Prairie, Kalamazoo
Smith, Mrs. T. C.....1215 Oakland Dr., Kalamazoo
Snyder, Mrs. Roscoe.....823 Oak St., Kalamazoo
Sofen, Mrs. M. B.....903 Edgemoor, Kalamazoo
Southworth, Mrs. Maynard.....Schoolcraft
Stewart, Mrs. William.....2945 Duke St., Kalamazoo
Stiller, Mrs. Anthony.....1235 N. Hillandale Dr., Kalamazoo
Stryker, Mrs. Homer.....448 W. Inkster, Kalamazoo
Upjohn, Mrs. E. Gifford.....2230 Glenwood Ave., Kalamazoo
Upjohn, Mrs. L. N.....1556 Long Rd., Kalamazoo
Vander Velde, Mrs. Kenneth.....1910 Waite, Kalamazoo
Verhage, Mrs. M. D.....1626 Grove, Kalamazoo
Volderauer, Mrs. John....905 Edgemoor Ave., Kalamazoo
Warnke, Mrs. R. D.....3012 Kenilworth, Kalamazoo
Weadon, Mrs. Preston.....2255 Tipperary, Kalamazoo
Wilbur, Mrs. E. P.....438 W. South, Kalamazoo
Wise, Mrs. Edwin.....2226 Sheffield Dr., Kalamazoo
Williamson, Mrs. Edwin.....6343 Douglas, Kalamazoo
Youngs, Mrs. C. A.....416 S. Burdick, Kalamazoo

Aitken, Mrs. George T.....926 Santa Lucia Dr., S.E., Grand Rapids
Albers, Mrs. G. Donald.....1838 Argentina Dr., S.E., Grand Rapids
Aldridge, Mrs. Charles.....1574 Mackinaw Rd., S.E., Grand Rapids
Andre, Mrs. Harvey M.....1121 Giddings Ave., S.E., Grand Rapids
Baert, Mrs. George H.....631 Prospect Ave., S.E., Grand Rapids
Barofsky, Mrs. Gerald F.....2415 Almont, S.E., Grand Rapids
Ballard, Mrs. M. S.....9 College, N.E., Grand Rapids
Balyeat, Mrs. Gordon W.....150 Morningside Dr., S.E., Grand Rapids
Batts, Mrs. Martin.....246 Aurora, S.E., Grand Rapids
Beaton, Mrs. James H.....1556 Pontiac Rd., S.E., Grand Rapids
Beeman, Mrs. Carl B.....826 Pinecrest, S.E., Grand Rapids
Beets, Mrs. W. C.....2221 Jefferson Dr., S.E., Grand Rapids
Bell, Mrs. C. M.....3121 Oakhollow Dr., S.E., Grand Rapids
Benjamin, Mrs. Howard.....957 Maxwell, S.E., Grand Rapids
Benson, Mrs. R. R.....1138 Chippewa Dr., S.E., Grand Rapids
Bergsma, Mrs. Stuart.....1942 Sherman, S.E., Grand Rapids
Bignall, Mrs. Rex.....2637 Belfast, S.E., Grand Rapids
Blackburn, Mrs. H. M.....2401 Breton Rd., S.E., Grand Rapids
Blocksma, Mrs. Ralph....739 Prospect, S.E., Grand Rapids
Boelkins, Mrs. Richard C.....834 Giddings, S.E., Grand Rapids
Boersma, Mrs. Donald.....920 Chippewa Dr., S.E., Grand Rapids
Boet, Mrs. John T.....551 Fountain, N.E., Grand Rapids
Booher, Mrs. Craig.....2609 Albert Dr., S.E., Grand Rapids
Bosch, Mrs. Leon C.....943 Santa Barbara Dr., S.E., Grand Rapids
Boyce, Mrs. David C.....2310 Estelle Dr., .SE., Grand Rapids
Brace, Mrs. Fred C.....2311 Academy Dr., N.E., Grand Rapids
Brink, Mrs. J. Russell.....1901 Argentina Dr., S.E., Grand Rapids
Brook, Mrs. J. D.....65 S. Wilson Ave., Grandville
Buist, Mrs. Samuel J.....1115 Santa Barbara, S.E., Grand Rapids
Bull, Mrs. Frank.....Sparta
Burroughs, Mrs. Frank. Jr.....159 S. Ottawa, Grandville
Butler, Mrs. William J.....327 Briarwood, S.E., Grand Rapids
Carpenter, Mrs. Luther C.....1818 Argentina Dr., S.E., Grand Rapids
Cayce, Mrs. William....640 Kent Hills Rd., Grand Rapids
Chandler, Mrs. Donald.....3347 E. Belt Line, N.E., Grand Rapids
Clahassey, Mrs. Erwin G.....427 Mulford Dr. S.E., Grand Rapids
Colvin, Mrs. Walter G.....48 Bel Air Dr., N.E., Grand Rapids
Corbus, Mrs. Burton R.....325 Union, S.E., Grand Rapids
Crane, Mrs. Harold.....2221 Madison, S.E., Grand Rapids
Cuncannon, Mrs. Edward M.....1745 Eastern, S.E., Grand Rapids
Currier, Mrs. Fred P.....955 Floral Dr., S.E., Grand Rapids
Damstra, Mrs. Harold J.....1022 Santa Cruz Dr., S.E., Grand Rapids
Davis, Mrs. David B.....1050 San Lucia Dr., S.E., Grand Rapids
Dawson, Mrs. W. Douglas.....1021 Iroquois Dr., S.E., Grand Rapids
DeBoer, Mrs. Clarence J.....191 Elwood, Grandville
DeBoer, Mrs. Guy W.....41 Maryland N.E., Grand Rapids
DeMaagd, Mrs. Gerald.....185 S. Monroe, Rockford
DeMol, Mrs. Richard J.....2425 College, S.E., Grand Rapids
Denham, Mrs. Robert H.....535 Plymouth Dr., S.E., Grand Rapids
DePree, Mrs. Joe.....849 Pinecrest, Grand Rapids
DeVel, Mrs. Leon..739 Plymouth Dr., S.E., Grand Rapids
DeVries, Mrs. Daniel.....812 Sigsbee, S.E., Grand Rapids
Dewey, Mrs. Kent A.....3205 Bonnell Dr., S.E., Grand Rapids
DeYoung, Mrs. Thies.....35 E. Division, Sparta
Diskey, Mrs. Donald G.....1911 Lake Michigan Dr. N.W., Grand Rapids
Dixon, Mrs. W. L.....420 E. Fulton, Grand Rapids
Doctor, Mrs. Luebert..3496 Lake Dr., S.E., Grand Rapids
Doyle, Mrs. John L.....875 Elliott, S.E., Grand Rapids
Droste, Mrs. James C.....1545 Seminole Rd., S.E., Grand Rapids
Dyer, Mrs. David.....550 Morris, S.E., Grand Rapids
Eaton, Mrs. Robert M.....213 Aurora, S.E., Grand Rapids
Eggleston, Mrs. H. R.....117 Page, N.E., Grand Rapids
Failing, Mrs. John F.....2617 Lake Michigan Dr., N.W., Grand Rapids
Farber, Mrs. Charles E.....2550 Maplewood Dr., Grand Rapids
Faust, Mrs. Lawrence W.....2047 Jefferson Dr., S.E., Grand Rapids
Fellows, Mrs. Kenneth F.....3341 Ashton Rd., S.E., Grand Rapids
Ferguson, Mrs. James.....2230 Hall, S.E., Grand Rapids
Ferguson, Mrs. Lynn A.....635 Cambridge, S.E., Grand Rapids
Ferguson, Mrs. Ward S.....2117 Hall, S.E., Grand Rapids
Ferrand, Mrs. Louis G.....119 N. Monroe, Rockford
Fitts, Mrs. Ralph L.....1930 Michigan Rd., N.E., Grand Rapids
Fitzgerald, Mrs. Erwin L.....2002 College, S.E., Grand Rapids
Flintoff, Mrs. William..1410 Thomas, S.E., Grand Rapids
Flynn, Mrs. Donald J.....836 Floral Dr., S.E., Grand Rapids
Foshee, Mrs. J. C.....315 Madison, S.E., Grand Rapids
Frantz, Jr., Mrs. Charles H.....1860 Lake Dr., S.E., Grand Rapids
Fuller, Mrs. E. H.....260 Paris, S.E., Grand Rapids
Fuller, Mrs. William J.....2633 Frederick Dr., S.E., Grand Rapids
Gamm, Mrs. Kenneth E...456 Morris, S.E., Grand Rapids
Gibbs, Mrs. Floyd.....155 Maryland, Grand Rapids
Gilbert, Mrs. R. H.....1125 San Jose, S.E., Grand Rapids
Gillett, Mrs. F. S.....1928 Sherman, S.E., Grand Rapids
Grant, Mrs. Lee O.....2730 Bonnell Rd., S.E., Grand Rapids
Grass, Mrs. E.J.....858 Pinecrest, S.E., Grand Rapids
Gray, Mrs. Fred B.....2333 Oakwood, S.E., Grand Rapids
Griffith, Mrs. Lucian S.....1934 Sherman, S.E., Grand Rapids
Haeck, Mrs. William....1225 Franklin, S.E., Grand Rapids
Hagerman, Mrs. David B.....1551 Seminole, S.E., Grand Rapids
Hamp, Mrs. Arthur....1059 Eastwood, S.E., Grand Rapids
Heetderks, Mrs. Dewey R.....240 Edgehill Dr., S.E., Grand Rapids
Hill, Mrs. Morgan.....534 Dogwood Rd., Ada
Hill, Mrs. Thomas.....710 N. Monroe, Lowell
Hodgen, Mrs. John T.....2320 Fulton Rd., E., Grand Rapids
Hoekstra, Mrs. Andrew L.....1812 Kreiser, S.E., Grand Rapids

Hoffs, Mrs. Albertus.....2607 Frederick Dr., S.E., Grand Rapids
Holcomb, Mrs. J. Winslow.....1441 Breton Rd., S.E., Grand Rapids
Hollander, Mrs. Stephan.....2027 Godwin, S.E., Grand Rapids
Hoogerhyde, Mrs. Jack.....3355 Ashton Rd., S.E., Grand Rapids
Houghton, Mrs. Richard.....525 Glenwood, S.E., Grand Rapids
Hudson, Mrs. Harry.....1540 Woodlawn, S.E., Grand Rapids
Hufford, Mrs. Alvin R.....2660 Oakwood, S.E., Grand Rapids
Humphrey, Mrs. James C.....1134 Cambridge, S.E., Grand Rapids
Hydrick, Mrs. Robert.....2013 Hamstead, N.W., Grand Rapids
Hyland, Mrs. William A.....2833 Bonnell, S.E., Grand Rapids
Ireland, Mrs. H. D.....701 Fuller, N.E., Grand Rapids
Irwin, Mrs. Thomas C.....1617 Reed St., S.E. Grand Rapids
Jack, Mrs. William..2201 Breton Rd., S.E., Grand Rapids
Jameson, Mrs. Fred.....2706 Oakwood Dr., S.E., Grand Rapids
Jaracz, Mrs. Walter J., Sr...36 Valley S.W., Grand Rapids
Jarvis, Mrs. Charles....218 Sligh Blvd., N.E., Grand Rapids
Jellema, Mrs. John F.....2115 Academy, N.E., Grand Rapids
Jensen, Mrs. William B.....2825 Oakwood, S.E., Grand Rapids
Johns, Mrs. Donald.....639 Hoyt, S.E., Grand Rapids
Johnston, Mrs. W. L.....1047 Gladstone, S.E., Grand Rapids
Jones, Mrs. Horace.....3004 Oakwood Dr., S.E., Grand Rapids
Kelly, Mrs. Edward F.....903 Orchard Ave., S.E., Grand Rapids
Klaus, Mrs. C. D.....214 Bristol, N.W., Grand Rapids
Kniskern, Mrs. Paul W.....1555 Edgewood, S.E., Grand Rapids
Kooistra, Mrs. Henry P...1564 Pontiac Rd., Grand Rapids
Kreulen, Mrs. Henry....2452 Godwin Ave., Grand Rapids
Kruse, Mrs. William....2225 Wilshire, S.E., Grand Rapids
Lamberts, Mrs. Austin....2253 Union, S.E., Grand Rapids
Lanning, Mrs. Nicholas.....1931 Jefferson, S.E., Grand Rapids
Lentini, Mrs. Joseph R.....2059 Anderson Dr., S.E., Grand Rapids
Lewis, Mrs. George.....120 Celia, S.E., Grand Rapids
Lieffers, Mrs. Harry.....331 Aurora, S.E., Grand Rapids
Lillie, Mrs. Walter.....1038 Pinecrest, S.E., Grand Rapids
List, Mrs. Carl F.....401 Lakeside Dr., S.E., Grand Rapids
MacDonell, Mrs. James.....619 Gladstone, S.E., Grand Rapids
MacIntyre, Mrs. Dugald.....562 Plymouth, S.E., Grand Rapids
Marsh, Mrs. John P.....1231 Sigsbee, S.E., Grand Rapids
Martinus, Mrs. Martin.....525 Overbrook Lane, S.E., Grand Rapids
Mattson, Mrs. Roger.....2692 Frederick Dr., S.E., Grand Rapids
McCormick, Mrs. John K.....401 Cheshire Dr., N.E., Grand Rapids
McDougal, Mrs. William J.....639 Kent Hills, N.E., Grand Rapids
McKenna, Mrs. Joseph L.....1525 Edgewood Dr., S.E., Grand Rapids
Meade, Mrs. Richard H., Jr...750 San Jose, Grand Rapids
Meeuwsen, Mrs. Bernard.....664 Winchell, S.E., Grand Rapids
Miller, Mrs. J. Duane.....2565 Frederick Dr., S.E., Grand Rapids
Miller, Mrs. J. J.....Marne
Mitchell, Mrs. Waldemar B.....1554 Seminole Rd., S.E., Grand Rapids
Moleski, Mrs. Joseph V.....1911 Hall, S.E., Grand Rapids
Moleski, Mrs. Leo T.....1462 Milton, S.E., Grand Rapids
Moleski, Mrs. Stanley.....1701 Pontiac Rd., S.E., Grand Rapids
Moll, Mrs. A. M.....3383 Fulton Rd., S.E., Grand Rapids
Moore, Mrs. Douglas.....1766 Breton Rd., S.E., Grand Rapids
Morley, Mrs. John....1505 Mackinaw, S.E., Grand Rapids
Mouw, Mrs. Dirk..2352 Jefferson Dr., S.E., Grand Rapids
Mulder, Mrs. G. Arthur.....2200 College, S.E., Grand Rapids
Mulder, Mrs. Jacob D.....6850 Division, S., Grand Rapids
Murphy, Mrs. Miles.....1628 Pontiac Rd., S.E., Grand Rapids
Nanzig, Mrs. Reinard.....821 Chippewa Dr., S.E., Grand Rapids
Nickel, Mrs. Kenneth.....1535 Groton Rd., S.E., Grand Rapids
Northouse, Mrs. Peter B.....1524 Pontiac Rd., S.E., Grand Rapids
Notier, Mrs. Victor A.....2601 Maplewood Dr., S.E., Grand Rapids
Oliver, Mrs. W. W.....7241 Belding Rd., N.E., Rockford
Paalman, Mrs. Russell.....497 Marywood Dr., N.E. Grand Rapids
Patterson, Mrs. P. W.....2032 Godwin, S.E., Grand Rapids
Payne, Mrs. C. Allen....1289 Perkins, N.E., Grand Rapids
Pearson, Mrs. Glenn.....519 Greenwood, S.E., Grand Rapids
Pedden, Mrs. John.....2140 Paris, S.E., Grand Rapids
Plekker, Mrs. J. D.....1115 Cadillac Dr., S.E., Grand Rapids
Pool, Mrs. John D.....518 Morris, S.E., Grand Rapids
Posthuma, Mrs. Albert..2247 College, S.E., Grand Rapids
Pott, Mrs. Abraham L.....612 Kent Hills Rd., N.E. Grand Rapids
Prothro, Mrs. Winston.....465 Cheshire Dr., N.E., Grand Rapids
Pyle, Mrs. Henry J.....525 Morris, S.E., Grand Rapids
Ragsdale, Mrs. L. V.....720 Plymouth Blvd., S.E., Grand Rapids
Ralph, Mrs. L. Paul....953 Rosewood, S.E., Grand Rapids
Rasmussen, Mrs. R. A.....737 Cambridge, S.E., Grand Rapids
Reed, Mrs. Torrance.....565 Morris, S.E., Grand Rapids
Reus, Mrs. William F.....334 Hobart, S.E., Grand Rapids
Riekse, Mrs. James M.....437 Hoyt, S.E., Grand Rapids
Rigterink, Mrs. John W.....1302 Franklin, S.E., Grand Rapids
Riley, Mrs. George L.....1651 Stoddard, N.E., Grand Rapids
Ringenberg, Mrs. J. C.....1736 Cambridge Blvd., S.E., Grand Rapids
Robb, Mrs. Charles.....433 Rosewood, S.E., Grand Rapids
Rodgers, Mrs. William L.....1432 Wealthy, S.E., Grand Rapids
Rooks, Mrs. Wendell.....1158 Nixon, N.W., Grand Rapids
Roosenberg, Mrs. Wm.....2903 Coit, N.E., Grand Rapids
Rosenzwieg, Mrs. Leonard.....315 Benjamin, S.E., Grand Rapids
Roth, Mrs. Emil M.....319 Morris, S.E., Grand Rapids
Ryan, Mrs. John.....1707 Wealthy, S.E., Grand Rapids
Sanders, Mrs. Jack F.....1184 Griswold, S.E., Grand Rapids
Scaubel, Mrs. Howard J.....728 Cambridge Blvd., S.E., Grand Rapids
Schermerhorn, Mrs. L. J.....40 College, N.E., Grand Rapids
Schneider, Mrs. George R.....934 Rosewood, S.E., Grand Rapids
Scott, Mrs. William B.....538 Union, S.E., Grand Rapids
Sevensma, Mrs. Eugene S.....2255 Riverside Dr., N.E., Grand Rapids
Sevey, Mrs. L.E.....1145 Benjamin, S.E., Grand Rapids
Shellman, Mrs. M. W.....1412 Mackinaw Rd., S.E., Grand Rapids
Shephard, Mrs. B. H.....Lowell

Sidell, Mrs. Richard H.....1308 Dunham, S.E., Grand Rapids
Siebers, Mrs. B. H.....1431 Burke, N.E., Apt. A, Grand Rapids
Slemons, Mrs. C. C.....1324 Logan, S.E., Grand Rapids
Sluyter, Mrs. J. S.....839 Iroquois, S.E., Grand Rapids
Smith, Mrs. A.B.....1434 Byron, S.E., Grand Rapids
Smith, Mrs. R. E.....1614 Mackinaw Rd., S.E., Grand Rapids
Smith, Mrs. R. B.....1529 Burton, S.E., Grand Rapids
Snapp, Mrs. C. F.....1058 Orchard, S.E., Grand Rapids
Snyder, Mrs. C. H.....3250 O'Brien Rd., S.W. Grand Rapids
Southwick, Mrs. Christopher.....760 San Jose Dr., S.E., Grand Rapids
Southwick, Mrs. G. H.....1935 SanLuRae, S.E., Grand Rapids
Steffensen, Mrs. W. H.....443 Plymouth, S.E., Grand Rapids
Stonehouse, Mrs. G. G.....208 Pioneer Rd., S.E., Grand Rapids
Stoneman, Mrs. Fernley.....40 E. Prairie, Grandville
Stover, Mrs. V. E.....860 Gladstone, S.E., Grand Rapids
Stuart, Mrs. G. J.....1413 Alexander, S.E., Grand Rapids
Sugiyama, Mrs. T...1006 Hollywood, N.E., Grand Rapids
Swenson, Mrs. H. C.....501 Elliott, S.E., Grand Rapids
Ten Have, Mrs. John.....3515 Briggs Blvd., N.E., Grand Rapids
Tesseine, Mrs. A. J.....425 Cambridge Blvd., S.E.,
Teusink, Mrs. Harry.....Cedar Springs
Thomson, Mrs. John W.....2029 Hall, S.E., Grand Rapids
Thompson, Mrs. Edward C.....1401 Breton Rd., S.E., Grand Rapids
Thompson, Mrs. F. D.....333 Gladstone, S.E., Grand Rapids
Tidey, Mrs. M. B.....261 College, S.E., Grand Rapids
Tiffany, Mrs. Joseph C.....2322 Jefferson, S.E., Grand Rapids
Torgerson, Mrs. William R.....530 Belvedere Dr., S.E., Grand Rapids
Truog, Mrs. Clarence P.....1470 Briarcliff Dr., S.E., R.R. No. 3, Grand Rapids
Uthoff, Mrs. Carl.....2253 Foster, N.E., Grand Rapids
Van Belois, Mrs. H. J.....2522 Union, S.E., Grand Rapids
Van Bree, Mrs. Raymond.....1521 Ridgewood, S.E., Grand Rapids
VanDenBerg, Mrs. Allison....1120 Cambridge Blvd., S.E., Grand Rapids
Vanden Berg, Mrs. William.....2094 Wealthy, S.E., Grand Rapids
VanderPloog, Mrs. William.....1343 Fuller, S.E., Grand Rapids
VanderVeer, Mrs. Corwin G.....1511 Sylvan, S.E., Grand Rapids
Van Duine, Mrs. H. J.....414 Brookside Dr., S.E., Grand Rapids
Van Noord, Mrs. G. A.....6850 Division, S., Grand Rapids
VanPortfliet, Mrs. Paul.....555 Mulford Dr., S.E., Grand Rapids
VanSolkema, Mrs. Andrew....1946 Lake Mich. Dr., N.W., Grand Rapids
Van Woerkom, Mrs. Daniel.....1857 Hillmount, N.W., Grand Rapids
Van Zwalenburg, Mrs. B. R.....2054 Anderson Dr., S.E. Grand Rapids
Veldman, Mrs. H. E.....2447 Oakwood, N.E., Grand Rapids
Venema, Mrs. Jay R.....450 Overbrook, S.E.,
Vining, Mrs. Keats K., Jr.....934 Princeton, S.E., Grand Rapids
Wahby, Mrs. Elmer F.....1108 Kenneberry Way, S.E., Grand Rapids
Waterman, Mrs. Donald.....1425 Burke, N.E., Grand Rapids
Weller, Mrs. Keith E.....1125 Orchard Ave., N.E., Grand Rapids
Wells, Mrs. Merrill.....3346 Coit Rd., N.E., Grand Rapids
Wenger, Mrs. A. Verne....132 Grand, N.E., Grand Rapids
Wenger, Mrs. John N.....Coopersville
Wiese, Mrs. John....3188 Bonnell Dr., S.E., Grand Rapids
Wilkes, Mrs. John B.....311 Aurora, S.E., Grand Rapids
Williams, Mrs. John R.....2059 College, S.E., Grand Rapids
Willits, Mrs. P. W.....337 Manhattan, S.E., Grand Rapids
Winter, Mrs. G. E.....2316 Jefferson Dr., S.E., Grand Rapids
Wurz, Mrs. J. F.....201 Norwood, S.E., Grand Rapids
Yared, Mrs. J. A.....1901 Lake Dr., S.E., Grand Rapids
Yegge, Mrs. John.....Kent City

LAPEER COUNTY

Bishop, Mrs. Clare.....Almont
Boruch, Mrs. Leon.....State Home, Lapeer
Buchanan, Mrs. Thomas Kay.....Imlay City
Burley, Mrs. David.....Almont
Chapin, Mrs. Clarence.....Columbiaville
Conaway, Mrs. Charles.....746 N. Monroe St., Lapeer
Dorland, Mrs. Clarke.....211 Lincoln St., Lapeer
Doty, Mrs. James R.....1335 N. Monroe, Lapeer
Greaver, Mrs. Cornell.....North Branch
Hunter, Miss Frances.....1091 Pine St., Lapeer
Hunter, Miss Mary Ellen.....1091 Pine St., Lapeer
Kay, Mrs. W. J.....307 Washington St., Lapeer
Kiehle, Mrs. Anna.....706 N. Main St., Lapeer
McBride, Mrs. John R.....914 Liberty St., Lapeer
Merz, Mrs. Henry G.....1242 Clark Rd., Lapeer
Rehn, Mrs. Adolph.....State Home, Lapeer
Smith, Mrs. Glenn.....Imlay City
Snowman, Mrs. Lynna.....306 N. Main St., Lapeer
Thomas, Mrs. Orville.....North Branch
Thompson, Mrs. May.....243 Clay St., Lapeer
Zemmer, Mrs. Harry.....Hannamon Rd., Columbiaville
Zolliker, Mrs. Carl.....State Home, Lapeer

LENAWEE COUNTY

Abraham, Mrs. A. O.....305 S. Church, Hudson
Benz, Mrs. Carl A.....150 Toledo St., Adrian
Blanchard, Mrs. L. E.....224 Seward, Hudson
Blanden, Mrs. Merwin R.....Ford Bldg., Tecumseh
Clawton, Mrs. W. T.....136 Chicago St., Britton
Cook, Mrs. Lynette.....Adrian
Dickman, Mrs. Harry M.....120 N. Church, Hudson
Eddy, Mrs. H. R. C.....114 Nat. Bk. Bldg., Adrian
Hammel, Mrs. Richard T.....Tecumseh
Heffron, Mrs. Charles.....Adrian
Heffron, Mrs. Howard H.....231 N. Main St., Adrian
Hewes, Mrs. William H.....146 E. Maumee St., Adrian
Huebner, Mrs. R. J.....R.F.D., Addison
Marsh, Mrs. R. G. B.....610 W. Logan St., Tecumseh
Sayre, Mrs. P. P.....121 N. Main St., Onsted
Whitehouse, Mrs. Keith H.....118 W. Main St., Morenci
Wilson, Mrs. George.....Clinton

LIVINGSTON COUNTY

Barton, Mrs. T. A.....4300 E. Grand River, Howell
Clarke, Mrs. Niles.....723 Spencer Rd., Brighton
Duffy, Mrs. Ray.....250 Main St., Pinckney
Gentles, Mrs. Ernest.....Mich. State Sanitorium, Howell
Hauer, Mrs. R. F.....Fowlerville
Hendren, Mrs. J. J.....Fowlerville
Hill, Mrs. H. C.....320 Madison St., Howell
Huntington, Mrs. H. G.....219 S. Walnut St., Howell
May, Mrs. Lewis E.....924 W. Grand River, Howell
McGregor, Mrs. A. J.....995 E. Main, Brighton
Polack, Mrs. Robert.....416 S. Michigan, Howell
Sigler, Mrs. Hollis.....809 N. Michigan, Howell
Schenden, Mrs. A. J.....6335 W. M36, Pinckney
Toan, Mrs. John.....203 Riddle, Howell
Walker, Mrs. E. G.....4485 Cordley Lake Rd., Lakeland

MACOMB COUNTY

Banting, Mrs. Oswald F.....Richmond
Barker, Mrs. J. G.....22420 Statler Blvd., St. Clair Shores
Bogucki, Mrs. Chester J.....8110 Bliss, Detroit 34
Brady, Mrs. Milo J.....60002 Gunston, Detroit
Bryce, Mrs. James W.....24830 Landon, Centerline
Buckley, Mrs. Daniel.....160 S. Walnut St., Mt. Clemens
Crawford, Mrs. A. M.....Box 176, Rt. 3, Rochester
Croman, Mrs. J. M.....131 Market, Mt. Clemens
Dudzinski, Mrs. E. J.....New Baltimore
Engels, Mrs. John A.....Richmond
Hartmann, Mrs. W. B.....3221 N. Gratiot. Mt. Clemens
Heine, Mrs. Austin.....Riverside Drive, Mt. Clemens
Kane, Mrs. W. J.....171 North Ave., Mt. Clemens
Lynch, Mrs. Russell E.....1051 Yorkshire, Grosse Pointe
McGuire, Mrs. A. J.....Utica
Mulligan, Mrs. P. T.....59 Ahrens Ave., Mt. Clemens
Peltier, Mrs. Stanley J.....151 North, Mt. Clemens
Persson, Mrs. G. A.....198 S. Gratiot, Mt. Clemens
Reitzel, Mrs. R. H.....1 Breitmeyer Pl., Mt. Clemens
Revere, Mrs. J. O.....192 S. Gratiot, Mt. Clemens
Reichman, Mrs. Joseph J.....70 Gallup Ave., Mt. Clemens
Rivard, Mrs. C. L.....32926 Jefferson, St. Clair Shores
Salot, Mrs. R. F.....11 Breitmeyer Place, Mt. Clemens
Siegfried, Mrs. E. G.....77 Scott, Mt. Clemens
Smith, Mrs. M. C.....117 Lodewyck, Mt. Clemens
Stryker, Mrs. Oscar....31032 Jefferson, St. Clair Shores
Stubbs, Mrs. H. W...29240 Grandview Ave., Mt. Clemens
Thompson, Mrs. A. A.....35 Miller St., Mt. Clemens
Ullrich, Mrs. R. W.....316 N. Gratiot, Mt. Clemens
Wellard, Mrs. Henry C.....204 Alfred St., New Baltimore
Whitley, Mrs. A.....22935 Raymond St., St. Clair Shores
Wilde, Mrs. M. M.....32171 Mound Rd., Warren
Wiley, Mrs. D. B.....45223 Cass Ave., Utica
Wolfson, Mrs. V. H.....64 Riverside Dr., Mt. Clemens
Wyte, Mrs. William C.....170 Eastman, Mt. Clemens

MANISTEE COUNTY

Dart, Mrs. Estella.....Fourth St., Manistee
Hansen, Mrs. E. C.....700 Cedar St., Manistee
Konopa, Mrs. John.....440 Cedar, Manistee
Longhrin, Mrs. John.....Maple St., Manistee
Miller, Mrs. E. B.....Elm St., Manistee
Ogilvie, Mrs. Gordon.....Third St., Manistee
Oakes, Mrs. E. A.....576 Bryant Ave., Manistee
Ramsdell, Mrs. Homer.....Oak St., Manistee
Swartz, Mrs. Marlow.....Bear Lake

MARQUETTE-ALGER COUNTIES

Acocks, Mrs. James.....Morgan Heights, Marquette
Amolsch, Mrs. Arthur L.....321 Pine St., Marquette
Barron, Mrs. Benzoin.....Munising
Bennett, Mrs. Matthew C.....409 E. Ohio, Marquette
Bolitho, Mrs. T. B.....425 E. Michigan Ave., Marquette
Bottom, Mrs. C. N.....624 N. Third, Marquette
Burke, Mrs. R. A.....Palmer
Casler, Mrs. Wilbur L.....127 East Ridge, Marquette
Cooperstock, Mrs. M.....402 E. Ridge, Marquette
Erickson, Mrs. A. N.....621 N. 4th, Ishpeming
Harkin, Mrs. John C.....310 E. Michigan, Marquette
Hornbogen, Mrs. D. P.....320 Cedar, Marquette
Howe, Mrs. Lloyd W.....431 E. Ridge, Marquette
Jaedecke, Mrs. R. G.....1427 N. 2nd St., Ishpeming
Knutson, Mrs. George O.....125 Main St., Negaunee
Kronschnabel, Mrs. Edward.....Gwinn
Lambert, Mrs. W. C.....347 Ridge, Marquette
Lyons, Mrs. James.....Lakewood, Marquette
Matthews, Mrs. Norman....1710 Presque Isle, Marquette
Narotzky, Mrs. A. S.....628 E. Ridge St., Ishpeming
Swinton, Mrs. A. L.....430 E. Arch, Marquette
Wickstrom, Mrs. G. B.....223 Lynn St., Munising

MASON COUNTY

Bacon, Mrs. Herbert.....125 W. State St., Scottville
Boldyreff, Mrs. E. E.....Custer
Clark, Mrs. James.....Box B, Fennville
Gaude, Mrs. Gordon.....Hopkins
Martin, Mrs. W. S.....107 Ludington, Ludington
Morrow, Mrs. Wm.....803 E. Ludington Ave., Ludington
Paukstis, Mrs. Chas.....502 N. Lakeshore Dr., Ludington
Ramseyer, Mrs. Gladwin.....421 Marrell St., Plainwell
Scott, Mrs. R. R.....806 E. Brother St., Scottville
Spencer, Mrs. C. M.....Scottville
Switzer, Mrs. G. O.....302 Lake Shore Dr., Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Anderson, Mrs. Gordon....309 N. Michigan, Big Rapids
Bruggema, Mrs. Jacob.....Evart
Campbell, Mrs. J. B.....320 Division St., Big Rapids
Chess, Mrs. Leo.....417 W. Upton, Reed City
Franklin, Mrs. Ben.....Remus
Ivkovich, Mrs. Paul.....335 West Upton, Reed City
Kelsey, Mrs. Lee F.....Lakeview
Kilmer, Mrs. David.....401 Osceola, Reed City
Kilmer, Mrs. Paul B.....350 W. Upton, Reed City
Kowaleski, Mrs. Edward.....Remus
Marston, Mrs. L. L.....Lakeview
Mitchell, Mrs. Harold C.....124 Mecosta, Big Rapids
Nelson, Mrs. Lorenzo.....Baldwin
Treynor, Mrs. Thomas P.....107 Ives Ave., Big Rapids
Van Auken, Mrs. Edw.....121 Sanborn Ave., Big Rapids
White, Mrs. J. A.....123 Cedar St., Big Rapids
Yeo, Mrs. Gordon.....209 Rust St., Big Rapids

MENOMINEE COUNTY

Agneburg, Mrs. Nils.....221 1st St., Menominee
Brukhardt, Mrs. H. R.....714 14th Ave., Menominee
Dewane, Mrs. F. J.....1409 7th St., Menominee
Gonty, Mrs. Arthur.....Frontenac Beach, Menominee
Flanagan, Mrs. C. B.....915 11th Ave., Menominee
Gleckman, Mrs. L. G.....1359 Main St., Marinette, Wisc.
Heidenreich, Mrs. J. R.....Daggett
Higley, Mrs. R. A.....1907 18th Ave., Menominee
Jones, Mrs. W. S., Sr.....101 15th Ave., Menominee
Jones, Mrs. W. S., Jr.....1834 1st St., Menominee
Kaye, Mrs. J. T.....1005 10th Ave., Menominee
Kerwell, Mrs. K. C.....Stephenson
Peterson, Mrs. A. R.....Daggett
Sethney, Mrs. H. T.....1012 1st Ave., Menominee
Sweany, Mrs. S. K.....Powers
Towey, Mrs. J. W.....Powers
Whitmarsh, Mrs. Thomas.....Stephenson

MIDLAND COUNTY

Ballmer, Mrs. Robert.....1111 W. Sugnet Rd., Midland
Berneir, Mrs. Joseph.....Box 26, Sanford
Blackhurst, Mrs. Robert....306 W. Meadowbrook, Midland
Bowsher, Mrs. Robert.....901 St. Andrews, Midland
Bulmer, Mrs. Dan J.....3110 W. Nelson, Midland
Buskirk, Mrs. Maurice.....310 W. Nelson, Midland
Carsons, Mrs. Ada.....1414 Sugnet Rd., Midland
Gay, Mrs. Harold....4589 Ruhle Rd., Route 1, Coleman
Gibson, Mrs. Russell.....Beaverton
Gordon, Mrs. Harold.....4113 Castle Dr., Midland
Gronemeyer, Mrs. Wm.....1009 St. Andrews, Midland
Holder, Mrs. B. B.....534 Woodcock, Midland
Howell, Mrs. R. H.....2710 Maple, Midland
Howe, Mrs. Irvin.....R. No. 1 Sugnet Rd., Midland
Ittner, Mrs. Martin.....509 Sugnet Rd., Midland
Kaasa, Mrs. Laurin.....2011 Ashman St., Midland
Kilian, Mrs. John.....3611 Jefferson, Midland
Lansborough, Mrs. Hester.....127 W. Nelson, Midland
Linsenmann, Mrs. Carl.....2606 Manor Dr., Midland
MacCallum, Mrs. Charles..1684 W. Sugnet Rd., Midland
Maynard, Mrs. William.....Coleman
Meisel, Mrs. Edward H.....413 Lingle Lane, Midland
Murphy, Mrs. J. E.....305 Federal St., Midland
Pike, Mrs. Melvin.....220 W. Nelson, Midland
Poznak, Mrs. Leonard.....1411 Crane Ct., Midland
Randolph, Mrs. S. H.....410 Jerome, Midland
Sherk, Mrs. Joseph.....161 Revere St., Midland
Willison, Mrs. C. H.....901 Elizabeth, Midland

MONROE COUNTY

Barker, Mrs. Vincent L.....104 W. Noble Ave., Monroe
Barrett, Mrs. Clarence D.....2133 Hollywood, Monroe
Blakey, Mrs. Leonard C.....330 Godfroy Ave., Monroe
Bond, Mrs. Wm. W.....475 Hollywood Dr., Monroe
Flanders, Mrs. L. P.....1434 Hurd Rd., Monroe
Frary, Mrs. R. A.....505 Strassbury Rd. R. No. 1, Monroe
Freud, Mrs. John W.....212 Hollywood, Monroe
Kelso, Mrs. S. N.....336 Cole Rd., Monroe
Laboe, Mrs. E. E.....424 Hollywood Dr., Monroe
Lammers, Mrs. Gerald P.....Ida
Loan, Mrs. George B.....50 Virginia Court, Monroe
Long, Mrs. E. C.....715 Hollywood Dr., Monroe
McDonald, Mrs. T. A.....467 Hollywood Dr., Monroe
McMillin, Mrs. J. H.....417 E. Elm Ave., Monroe
Meier, Mrs. Walter.....306 S. Macomb, Monroe
Middleton, Mrs. Wm. J. S.....465 Borgess, Monroe
Newcomer, Mrs. S. R.....1535 Hollywood Dr., Monroe
Reisig, Mrs. A. H.....430 Hollywood Dr., Monroe
Sanger, Mrs. E. J.....716 Hollywood Dr., Monroe
Siffer, Mrs. J. H.....32 S. Macomb St., Monroe
Sisman, Mrs. Bernard.....524 Hollywood Dr., Monroe
Wagar, Mrs. Spencer.....711 Hollywood Dr., Monroe
Williams, Mrs. R. J.....306 Godfroy Ave., Monroe

MUSKEGON COUNTY

August, Mrs. Ralph.....R. No. 2, Spring Lake
Beers, Mrs. Charles.....67 Crescent, Muskegon Heights
Benedict, Mrs. Arthur.....1633 Clinton, Muskegon
Bolthouse, Mrs. Robert.....1641 Jefferson, Muskegon
Bond, Mrs. William.....1724 Peck St., Muskegon
Boyd, Mrs. DeVere.....1731 Clinton, Muskegon
Bradshaw, Mrs. Park.....636 Ruddiman, No. Muskegon
Busard, Mrs. R. I...3910 Highgate, Roodmont, Muskegon
Christopherson, Mrs. J. W.....1276 Lake Shore Drive, Muskegon
Clapp, Mrs. Henry.....1585 Glen, Glenside, Muskegon
Clark, Mrs. Harry.....1450 Leahy, Muskegon
Closz, Mrs. Harold.....1727 Jefferson, Muskegon
Dasler, Mrs. Adolph.....4177 Highgate Rd., Roodmont, Muskegon
Dykhuizen, Mrs. Harold....962 W. Mona Brook Rd., Muskegon
Ellis, Mrs. Nicholas.....1883 Lake Shore Dr., Muskegon
Emerick, Mrs. Robert.....1714 Leahy, Muskegon
Engstrom, Mrs. Albert.....Montague
Fleishman, Mrs. Norman.....940 Kampenga, Muskegon
Folsom, Mrs. John.....2488 Pine Grove, Muskegon
Gaikema, Mrs. Everett....605 First St., North Muskegon
Garber, Mrs. Frank.....703 Ruddiman, North Muskegon
Gillard, Mrs. James.....1669 Peck, Muskegon
Griffith, Mrs. Robert.....64 W. Larch, Muskegon
Hanley, Mrs. William.....2535 Pine Grove, Muskegon
Harryman, Mrs. James.....1694 Jefferson, Muskegon
Hartwell, Mrs. Shattuck,.....1665 Jefferson, Muskegon
Heneveld, Mrs. Edward.....82 W. Dale, Muskegon
Heneveld, Mrs. John....4238 Harbor Point Dr., Muskegon
Heneveld, Mrs. Robert.....1458 Montague, Muskegon
Holly, Mrs. Leland.....Scenic Drive, Muskegon
Joistad, Mrs. Arthur.....Interlaken, North Muskegon
Kane, Mrs. Thomas.....1323 4th St., Muskegon
Kerr, Mrs. Howard....2378 Hadden, Glenside, Muskegon
Kleaveland, Mrs. Justin.....654 Wendover, Roodmont, Muskegon
Lapham, Mrs. Landon.....Whitehall
Lauretti, Mrs. Emil.....1693 Jefferson, Muskegon
Laurin, Mrs. Vilda.....Scenic Drive, Muskegon
LeFevre, Mrs. William.....3033 Scenic Drive, Muskegon
Loder, Mrs. L. L.....1193 Ransom, Muskegon
Maples, Mrs. Douglas.....814 Moulton, North Muskegon
McNair, Mrs. John.....845 Sanford, Muskegon
Medema, Mrs. Paul.....1661 Clinton, Muskegon
Meengs, Mrs. Marvin.....972 Randall Rd., Muskegon
Morford, Mrs. Fred.....Scenic Drive, Muskegon
Mulder, Mrs. Lambertus.....1085 Apple, Muskegon
Mulligan, Mrs. A.....123 W. Larch, Muskegon
Myer, Mrs. Clifton.....912 Lake, North Muskegon
Prentice, Mrs. Edwin.....2325 Westwood Dr., Glenside, Muskegon
Oden, Mrs. C. L. A.....1593 Jefferson, Muskegon
Price, Mrs. Leonard.....1182 Terrace, Muskegon
Risk, Mrs. Robert D.....3980 Highgate Rd., Roodmont, Muskegon

Scholle, Mrs. Norbert.....635 Cambridge Rd., Roodmont, Muskegon
Shebesta, Mrs. E. M.....2342 Westwood Rd., Glenside, Muskegon
Swenson, Mrs. Leland.....3503 Scenic Dr., Muskegon
Smathers, Mrs. Ward.....4160 Airline Rd., Muskegon
Sears, Mrs. Richard.....1845 Spencer Dr., Muskegon
Stone, Mrs. M. E.....1541 Peck, Muskegon
Teifer, Mrs. Charles.....1652 Peck, Muskegon
Tellman, Mrs. H. C.....2417 Hadden, Glenside, Muskegon
Thornton, Mrs. Eugene S.....Interlaken, North Muskegon
Tyler, Mrs. William.....1572 Jefferson, Muskegon
VanderLaan, Mrs. John....2200 Baker, Muskegon Heights
VanGelder, Mrs. William C.....948 Wendover, Roodmont, Muskegon
Wagenaar, Mrs. Edward.....164 Catherine, Muskegon
White, Mrs. Warren G.....1567 Jiroch, Muskegon
Wiersma, Mrs. Silas.....1337 Peck, Muskegon
Wildgen, Mrs. Bernard..975 W. Seminole Rd., Muskegon
Wilson, Mrs. Pitt.....189 Houston, Muskegon

NEWAYGO COUNTY

Black, Mrs. Lulu.....Holton
Geerlings, Mrs. L. J.....Lake Drive, Fremont
Geerlings, Mrs. Willis.....28 East Oak St., Fremont
Klein, Mrs. J. Paul.....40 East Pine St., Fremont
Masters, Mrs. B. L.....415 E. Maple, Fremont
O'Neil, Mrs. John.....351 E. Cherry, Fremont

NORTHERN MICHIGAN COUNTIES

Allen, Mrs. Robert.....Petoskey
Conti, Mrs. Joseph.....924 Mitchell, Petoskey
Crippen, Mrs. Edward.....Mancelona
Grate, Mrs. L. E. .....101 S. Prospect, Charlevoix
Lilga, Mrs. H. V.....929 Michigan, Petoskey
Litzenburger, Mrs. Albert.....411 Pearl, Boyne City
Mateskon, Mrs. V. S.....909 Spruce St., Petoskey
McEvoy; Mrs. F. J.....Royal Oak
Mayne, Mrs. Fred.....Cheboygan
Reus, Mrs. Leonard.....729 Lockwood Ave., Petoskey
Rodgers, Mrs. John.....Bellaire
Saltonstall, Mrs. G. B.....929 Michigan, Charlevoix
Terr, Mrs. Isaac.....102 Auld, Charlevoix

OAKLAND COUNTY

Abbott, Mrs. V. C.....111 Illinois, Pontiac
Albrecht, Mrs. R.....2925 Orchard Lake Rd., Keego Harbor
Arnkoff, Mrs. Harry.....260 Draper, Pontiac
Aschenbrenner, Mrs. Zac....23240 Power Rd., Farmington
Aulie, Mrs. Hal G.....1219 E. Dallas, Royal Oak Twp.
Baker, Mrs. Robert.....1129 Fairfax, Birmingham
Barker, Mrs. Charles....5756 Franklin Rd., Birmingham
Barker, Mrs. Howard.....Martell Dr., Bloomfield Hills
Bannow, Mrs. Robert.....23 Keswik, Birmingham
Bauer, Mrs. Ernest W.....48 W Roberts, Hazel Park
Beattie, Mrs. Willard.....314 Maplehurst, Ferndale
Belknap, Mrs. Warren F.....2020 Roseland, Royal Oak
Berg, Mrs. Richard....1040 Indianwood Rd., Lake Orion
Blackwell, Mrs. Leonard.....549½ Perry, Pontiac
Blakeney, Mrs. James.....17 Utica, Pontiac
Boucher, Mrs. Roman.....5451 Brookdale, Birmingham
Bowers, Mrs. Charles.....213 Cedardale, Pontiac
Bradley, Mrs. E. L.....262 Josephine, Pontiac
Burgess, Mrs. Charles.....49 Oxford, Pleasant Ridge
Burke, Mrs. Chauncey..1123 Glengarr Circle, Birmingham
Campbell, Mrs. M. D.....3 Sylvan Ave., Pleasant Ridge
Cefai, Mrs. Anthony.....73 Miami Rd., Pontiac
Cobb, Mrs. Leon.....113 Franklin Rd., Pontiac
Cobb, Mrs. Thos.....4415 Motorway Dr., Pontiac
Cudney, Mrs. Ethan B.....216 Oneida, Pontiac
Darling, Mrs. C. G.....Lone Pine Ct., Bloomfield Hills
DeLawter, Mrs. H.....1298 Brookwood Lane, Birmingham
Deutsch, Mrs. Wm. L.....600 W. 11 Mile Rd., Royal Oak
Dobski, Mrs. Edwin....1637 Lakeview Dr., Sylvan Lake, Pontiac
Dunn, Mrs. Lewis.....3924 12 Mile Rd., Berkley
Durocher, Mrs. N. E.....2880 Old Orchard Dr., Pontiac
Ekelund, Mrs. C. T.....149 Ottawa Dr., Pontiac
Elder, Mrs. Edward, Jr.....88 Thorpe St., Pontiac
Evseff, Mrs. George.....4506 Cooper, Royal Oak
Fink, Mrs. L. J.....257 Ottawa Rd., Pontiac
Foust, Mrs. E. W.....28145 Lathrup, Birmingham
Fox, Mrs. Ralph M.....230 Westwood, Birmingham
Gaber, Mrs. Ben.....24211 Geneva, Oak Park
Gaensbauer, Mrs. Ferd.....127 Illinois, Birmingham
Gatley, Mrs. C. R.....75 Devon Rd., Pontiac
Gehringer, Mrs. N. F.....326 W. Iroquois, Pontiac
Geist, Mrs. E.....2035 Pontiac Rd., Rochester
Gerls, Mrs. Frank.....536 W. Huron, Pontiac
Gibson, Mrs. Richard.....1011 Hazel, Birmingham
Gibson, Mrs. Wellington.....Commerce St., Milford
Gill, Mrs. Mathew J.....3175 Franklin Rd., Pontiac
Goode, Mrs. Norman.....302 E. Maryland, Royal Oak
Haddock, Mrs. D.....5800 Pontiac Trail, RFD No. 5, Pontiac
Hardy, Mrs. Geo. C...240 Oak Lane, R. No. 2, Rochester
Heanes, Mrs. Merle.....75 Spokane, Pontiac
Hendren, Mrs. Owen.....1025 Pilgrim, Birmingham
Hoekman, Mrs. Aben.....1740 Hamilton, Pontiac
Hosner, Mrs. Robt.....1712 Sycamore, Royal Oak
Howlett, Mrs. E. V.....1029 James K Blvd., Pontiac
Hoyt, Mrs. Donald....7530 Maceday Lake Rd., Clarkston
Hubert, Mrs. John R.....Stoneleigh Dr., Bloomfield Hills
Ignatius, Mrs. V.....1120 E. 9 Mile Rd., Ferndale
Keeffe, Mrs. Eugene.....524 Williamsbury, Birmingham
Kemp, Mrs. F. J.....85 Barrington Rd., Pontiac
Kemp, Mrs. Lloyd.....1055 Yarmouth, Birmingham
Kendrick, Mrs. H. F.....630 E. Bennett Rd., Pontiac
Koehler, Mrs. Wm.....1907 Houstonia Rd., Royal Oak
Kozonis, Mrs. Michael.....168 Mohawk Rd., Pontiac
Lahti, Mrs. Paul T.....2412 Benjamin, Royal Oak
LaMarche, Mrs. Norman.....20031 Stratford, Detroit
Larson, Mrs. A. H.....2640 Woodbine Dr., Pontiac
Levine, Mrs. Bernard.....25101 Coolidge, Oak Park
Ling, Mrs. Theodore.....33221 Shiawassee, Farmington
Lyons, Mrs. R. T.....200 Oneda, Pontiac
Markle, Mrs. John.....8 Fairwood, Pleasant Ridge
Mason, Mrs. Robert.....564 Overhill, Birmingham
Maxim, Mrs. Edward.....711 Pontiac St., Pontiac
McCain, Mrs. French..296 N. Hunter Blvd., Birmingham
McConkie, Mrs. J. P.....768 Larchlea, Birmingham
McNeil, Mrs. H. H.....Hickory Grove Rd., Bloomfield Hills
Mehas, Mrs. Constantine..7350 Cooley Lake Rd., Pontiac
Meisner, Mrs. H. E.....12910 Oak Pk., Oak Park
Miller, Mrs. H. L.....1832 Greenleaf, Royal Oak
Miller, Mrs. Sidney.....1117 Stanley, Birmingham
Monroe, Mrs. John.....846 W. Huron, Pontiac
Nalepa, Mrs. Eugene.....2332 Rutherford Rd., Pontiac
Naz, Mrs. John.....2726 Orange Grove, Pontiac
Neafie, Mrs. C. A.....493 Orchard Lake Ave., Pontiac

Norup, Mrs. John.....2635 Coolidge Hwy., Berkley
Olsen, Mrs. R. E.....3325 Franklin Rd., Pontiac
Palmer, Mrs. Hayden.....62 Wenonah, Pontiac
Payton, Mrs. Chas. F.....1002 Pilgrim, Birmingham
Pearce, Mrs. James F.....10855 Hart, Huntington Woods
Petroff, Mrs. George N.....38 Gage St., Pontiac
Porritt, Mrs. Ross.....131 Chippewa, Pontiac
Prather, Mrs. Frank.....701 E. Liberty, Milford
Prevette, Mrs. W. C.....221 Pike, Pontiac
Prosser, Mrs. M. G.....3803 Elizabeth Lake Rd., Pontiac
Quinn, Mrs. James R.....1021 Stanley, Birmingham
Raynale, Mrs. Geo. P.....423 Tooting Lane, Birmingham
Read, Mrs. James.....16835 Stansbury, Detroit
Reid, Mrs. Fred T.....47 Broadacre, Clawson
Riggs, Mrs. Harry L.....234 S. Johnson, Pontiac
Riker, Mrs. Aaron D.....4050 Commerce Rd., Pontiac
Rupp, Mrs. Edson.....202 Crane Ave., Royal Oak
Russell, Mrs. V. P.....9 Elm Park, Pleasant Ridge
Ruva, Mrs. Joseph.....97 S. Edith St., Pontiac
Schuneman, Mrs. Howard... ....1312 Vinsetta, Royal Oak
Segula, Mrs. Robert.....1407 Avondale, Pontiac
Sempere, Mrs. Charles.....2225 Avondale, Pontiac
Sheridan, Mrs. Michael....1307 S. Washington, Royal Oak
Sigler, Mrs. Lewis.....920 James K. Blvd., Pontiac
Shadley, Mrs. Maxwell.....94 Ottawa Dr., Pontiac 18
Sheffield, Mrs. L. S.....4651 Motorway Dr., Pontiac
Smith, Mrs. D. S.....135 Wenonah Dr., Pontiac
Spencer, Mrs. L. H.....26039 Huntington, Huntington Woods
Spoehr, Mrs. Eugene.....17 Elm Park, Pleasant Ridge
Spohn, Mrs. Earl.....414 Hendrie Blvd., Royal Oak
Stahl, Mrs. Harold.....Oxford
Stanley, Mrs. William.....23625 Woodward, Ferndale
Steffes, Mrs. Everett.....1724 Beverly Rd., Berkley
Steinberg, Mrs. Norman N.....26550 Dundee Rd., Huntington Woods
Sullenberger, Mrs. Neil H.....Lakeview, Pontiac 19
Sutton, Mrs. Palmer E.....1617 Vinsetta, Royal Oak
Swickle, Mrs. Edward.....2643 Burnham, Royal Oak
Tuck, Mrs. Raymond.....17 Delaware Dr., Pontiac
Van Haltern, Mrs. Harold.....3670 Erie Dr., Pontiac
Vanden Berg, Mrs. K.....4045 Lakewood, Pontiac
Virga, Mrs. Geo. M...12744 LaSalle, Huntington Woods
Wake, Mrs. Douglas.....1307 S. Washington, Royal Oak
Webber, Mrs. Lynn....Pontiac General Hospital, Pontiac
White, Mrs. R. Hamilton.....379 Hamilton, Birmingham
Whitehouse, Mrs. John....Pontiac State Hospital, Pontiac
Wigent, Mrs. Ralph.....171 Crestwood St., Pontiac
Williams, Mrs. John....6570 Commerce Lake Rd., Pontiac
Zujko, Mrs. Alphonse.....166 Mohawk, Pontiac

OTTAWA COUNTY

Arendshorst, Mrs. William.....131 E. 31st St., Holland
Beernink, Mrs. E.....430 Duncan St., Grand Haven
Bloemendal, Mrs. W.....411 Woodlawn, Grand Haven
Boersma, Mrs. Vernon.....64 W. 14th St., Holland
Cook, Mrs. Carl.....597 Crescent Dr., Holland
DeYoung, Mrs. F.....212 N. Buchanan, Spring Lake
Frieswyck, Mrs. Melvin.....148 S. Division St., Zeeland
Groat, Mrs. Frank.....633 Franklin, Grand Haven
Hager, Mrs. R.....Hudsonville
Kemme, Mrs. G. J.....Rt. No. 3, Zeeland
Kools, Mrs. Willis.....194 W. 11th St., Holland
Kuipers, Mrs. S. W.....Holland
Nykamp, Mrs. R.....Zeeland
Ten Have, Mrs. R.....1016 Sheldon, Grand Haven
Ten Pas, Mrs. Henry.....Box 47, Hamilton
Timmerman, Mrs. E. C.....Coopersville
Van Appledorn, Mrs. Chester.....69 W. 14th St., Holland
Vander Berg, Mrs. E.....69 W. 14th, Holland
Vander Velde, Mrs. Otto.....721 S. Shore Dr., Holland
Wells, Mrs. Kenneth.....Spring Lake
Westrate, Mrs. William Jr.....50 E. 10th St., Holland
Winter, Mrs. J. K.....726 State, Holland

SAGINAW COUNTY

Ackerman, Mrs. G. L.....316 Brockway Pl., Saginaw
Albers, Mrs. M. J.....(Military Service)
Anderson, Mrs. W. K.....316 S. Porter, Saginaw
Bishop, Mrs. H. M.....405 Superior St., Saginaw
Brender, Mrs. F. P.....Frankenmuth
Brock, Mrs. W. H.....728 N. Michigan, Saginaw
Bruggers, Mrs. L.....2543 N. Woodbridge, Saginaw
Bruton, Mrs. Martin.....2207 Adams Blvd., Saginaw
Bucklin, Mrs. R. V.....2112 Adams Blvd., Saginaw
Button, Mrs. A. C.....514 Hayden, Saginaw
Bullington, Mrs. B. M.....1924 Handley, Saginaw
Busch, Mrs. F. J.....40 E. Hannum Blvd., Saginaw
Butler, Mrs. M. G.....1440 Hemmeter Rd., Saginaw
Cady, Mrs. F. J.....20 W. Hannum Blvd., Saginaw
Cady, Mrs. F. J., Jr.....1512 Vermont, Saginaw
Cambridge, Mrs. V. W.....1219 Fitzhugh, Saginaw
Cameron, Mrs. Allan K.....1602 Howard St., Saginaw
Campbell, Mrs. L. A.....335 Brockway Pl., Saginaw
Caumartin, Mrs. Hugh T...1537 S. Washington, Saginaw
Chisena Mrs. P. R.....6227 Dixie Hwy., Saginaw
Claytor, Mrs. A. A.....603 N. Third, Saginaw
Comer, Mrs. Walter H.....120 Alice, Saginaw
Cortopassi, Mrs. A. J.....326 S. Washington, Saginaw
Cortopassi, Mrs. V. E.....221 Ardussi, Saginaw
Cory, Mrs. C. W.....918 Throop St., Saginaw
Curts, Mrs. J. H.....3210 State St., Saginaw
Durman, Mrs. D. C.....1530 Ottawa Blvd., Saginaw
Ely, Mrs. Cecil W.....1820 Janes Ave., Saginaw
Ernst, Mrs. A. R.....443 S. Weadock, Saginaw
Fleschner, Mrs. Thomas E.....7444 W. Birch Run Rd., Birch Run
Friedrick, Mrs. David F.....615 Tuscola, Frankenmuth
Gage, Mrs. D. P.....134 Borland St., Saginaw
Galsterer, Mrs. E. C.....417 Brockway Pl., Saginaw
Gamon, Mrs. Adam E.....905 N. Michigan, Saginaw
Gardner, Mrs. J. H.....416 Ann St., Saginaw
Gomon, Mrs. L. D.....10 Edgewood Rd., Saginaw
Grigg, Mrs. Arthur.....2015 Gratiot, Saginaw
Hand, Mrs. Eugene.....1487 S. Washington St., Saginaw
Harvie, Mrs. L. C.....417 Ardussi, Saginaw
Heavenrich, Mrs. R. M.....225 Garden Lane, Saginaw
Helmkamp, Mrs. H. O.....2311 Mershon, Saginaw
Hester, Mrs. E. G.....2525 N. Court, Saginaw
Hill, Mrs. V. L.....1270 Hemmeter Rd., Saginaw
Howell, Mrs. Donald.....2112 Gratiot, Saginaw
Hyslop, Mrs. William T.....2008 Harry, Saginaw
Jaenichen, Mrs. Robert.....419 S. Weadock, Saginaw
James, Mrs. J. W.....253 Snow, Saginaw
Jiroch, Mrs. R. S.....722 S. Warren, Saginaw
Johnstone, Mrs. K. T.....1024 Fischer Dr., Saginaw
Kemp, Mrs. J. N.....1322 S. Michigan, Saginaw
Kempton, Mrs. R. M.....415 Hayden St., Saginaw
Kerr, Mrs. W. B.....1903 Bond St., Saginaw
Kickham, Mrs. Edward.....3525 Mershon St., Saginaw
Kolesar, Mrs. R. C.....200 Linton, Saginaw
Kowals, Mrs. F. V.....1429 S. Park, Saginaw
Kramer, Mrs. Charles G.....1607 Howard, Saginaw
Kretschmer, Mrs. T. V.....700 Remington, Saginaw
Lassignal, Mrs. Jules C.....1312 State, S., Saginaw
Leitch, Mrs. A. E.....1100 Hoyt, Saginaw
Ling, Mrs. Kenneth C.....Hemlock
Lohr, Mrs. O. W.....614 Madison, Saginaw
Luger, Mrs. Fred I.....1970 N. River Rd., Saginaw
Lurie, Mrs. Robert I.....1505 Howard,, Saginaw

Lyle, Mrs. R. C.....3821 State St., Bridgeport
MacKinnon, Mrs. E. D.....1616 Court St., Saginaw
MacMeekin, Mrs. J. W.....Center Woods, Saginaw
Manning, Mrs. J. Edward.....1627 Brown St., Saginaw
Manning, Mrs. John W., III.....821 Congress, Saginaw
Markey, Mrs. F. L.....2011 Brockway, Saginaw
Markey, Mrs. J. P.....2425 Adams Blvd., Saginaw
Martzowka, Mrs. W. P.....2330 Delaware Blvd., Saginaw
Matthews, Mrs. H. C.....14 Benton Rd., Saginaw
Maurer, Mrs. J. A.....20 Hammond Rd., Saginaw
Maurer, Mrs. J. G., Sr.....2231 Delaware, Saginaw
Mayne, Mrs. Harold E.....1585 Glendale, Saginaw
McKinney, Mrs. A. R.....1403 Howard St., Saginaw
McLandress, Mrs. J. A.....717 Court St., Saginaw
Meyer, Mrs. H. J.....6243 Dixie Hwy., Bridgeport
Miller, Mrs. Glen F.....126 Graham, Saginaw
Moon, Mrs. Raymond.....1008 Hancock St., Saginaw
Morgrette, Mrs. L. J.....1820 Stark St., Saginaw
Morris, Mrs. K. M.....1826 W. Michigan, Saginaw
Mudd, Mrs. R. D.....1001 Hoyt St., Saginaw
Murphy, Mrs. A. P.....512 N. Michigan, Saginaw
Murray, Mrs. C. R.....1584 Glendale, Saginaw
Murray, Mrs. M. J.....603 S. Jefferson, Saginaw
Nelson, Mrs. O. A.....1654 Lathrup, Saginaw
Northway, Mrs. Robert O.....2151 Gratiot, Saginaw
Novy, Mrs. F. O.....420 S. Jefferson, Saginaw
Olson, Mrs. C. P.....2505 Court, Saginaw
Ostrander, Mrs. F. W.....Freeland
Phillips, Mrs. Homer A.....2420 Adams Blvd., Saginaw
Pietz, Mrs. Frederick.....2139 Gratiot, Saginaw
Potvin, Mrs. C. D.....206 S. Carolina, Saginaw
Powers, Mrs. Robert.....602 Thompson, Saginaw
Prather, Mrs. Perry.....1611 Barnard, Saginaw
Prior, Mrs. Richard.....1734 Kendrick, Saginaw
Richards, Mrs. N. W.....2111 Brockway, Saginaw
Richter, Mrs. E. P.....1210 Court, Saginaw
Richter, Mrs. H. J.....2305 Adams Blvd., Saginaw
Ruskin, Mrs. David B.....246 Lockwood, Saginaw
Ryan, Mrs. R. S.....623 S. Park St., Saginaw
Sample, Mrs. J. T.....602 Rust St., Saginaw
Sargent, Mrs. D. V.....1632 Stark St., Saginaw
Schaiberger, Mrs. E. G.....10164 Dixie Highway, Birch Run
Schneider, Mrs. A. N.....1902 N. Bond, Saginaw
Sharp, Mrs. M. C.....2202 Barnard St., Saginaw
Sheldon, Mrs. S. A.....2 Holland Court, Saginaw
Siler, Mrs. D. E.....47 Ardmore Pl., Saginaw
Skowronski, Mrs. C. A.....1401 E. Genesee, Saginaw
Slack, Mrs. W. K.....625 S. Washington, Saginaw
Smiley, Mrs. Gordon L.....260 Snow St., Saginaw
Smith, Mrs. Chandler.....1605 Hanchett, Saginaw
Stahly, Mrs. E. H.....1900 Coolidge Ave., Saginaw
Stander, Mrs. A. C.....1411 Court St., Saginaw
Stewart, Mrs. G. W.....4343 State Rd., Saginaw
Sulfridge, Mrs. Hugh L., Jr...1485 N. River Rd., Saginaw
Thompson, Mrs. Arthur B.....302 Jameson, Saginaw
Tiedke, Mrs. G. E.....218 Gratiot, Saginaw
Toshach, Mrs. Clarence....Rt. No. 7, Schust Rd., Saginaw
Trytten, Mrs. E. G.....2835 Midland Rd., Saginaw
Volk, Mrs. V. K.....3340 Hospital Rd., Saginaw
Watson, Mrs. R. S.....820 N. Michigan, Saginaw
Weeks, Mrs. E. G.....1413 Howard St., Saginaw
Wiedner, Mrs. Garland.....1440 Gratiot, Saginaw
Weiss, Mrs. Arno.....4945 Dundale Ct., Saginaw
Westlund, Mrs. Norman.....131 S. Charles, Saginaw
Wright, Mrs. Edwin M.....128 Lynn, Saginaw
Yntema, Mrs. Stuart.....3 E. Hannum, Saginaw

ST. CLAIR COUNTY

Bailey, Mrs. Robert.....4579 Lake Shore, Port Huron
Banting, Mrs. Kenneth.....3540 Gratiot Ave., Port Huron
Barss, Mrs. Joseph.....2815 10th Ave., Port Huron
Battley, Mrs. J. C. S.....2038 Military, Port Huron
Beck, Mrs. F. K.....2902 Military St., Port Huron
Beer, Mrs. J. F.....711 N. Riverside Dr., St. Clair
Benjamin, Mrs. C. C.....3023 Gratiot Ave., Port Huron
Borden, Mrs. Charles....4520 Lake Shore Rd., Port Huron
Bottomley, Mrs. T. H.....4440 Gratiot Ave., Port Huron
Boughner, Mrs. W. F.....Algonac
Bowden, Mrs. William S.....551 Maple, Marine City
Cleland, Mrs. W. D.....1320 Court St., Port Huron
Clifford, Mrs. Robert P.....910 N. Riverside, St. Clair
Clyne, Mrs. B. C.....Yale
Coury, Mrs. John.....4254 Gratiot Ave., Port Huron
Davison, Mrs. William.....2920 Military St., Port Huron
Douvas, Mrs. Nicholas.....1712 Court St., Port Huron
Fitzgerald, Mrs. E. W.....4129 Gratiot Ave., Port Huron
Gholz, Mrs. Anthony C.....1407 21st St., Port Huron
Holcomb, Mrs. R. J.....141 S. Main St., Marine City
Hoyt, Mrs. C. N.....67 Gratiot Blvd., R 2, Port Huron
Kahn, Mrs. O. B.....Capac
Koch, Mrs. Donald A...4802 Lake Shore Rd., Port Huron
Lauridsen, Mrs. James.....2833 Gratiot Ave., Port Huron
Ludwig, Mrs. Claude.....3550 Stone St., Port Huron
Ludwig, Mrs. Fred.....2864 Military, Port Huron
Martin, Mrs. Clyde.....3786 Gratiot Ave., Port Huron
McCoy, Mrs. L. F.....4673 Lake Shore Rd., Port Huron
Meredith, Mrs. E. W.....4380 Gratiot Ave., Port Huron
Novak, Mrs. Walter.....2651 Military St., Port Huron
Patterson, Mrs. D. W...4240 Keewahden Dr., Port Huron
Pollack, Mrs. Donald....5014 Lake Shore Dr., Port Huron
Sanderson, Mrs. J. L.....4470 Gratiot Ave., Port Huron
Schaefer, Mrs. W. A.....2551 Military St., Port Huron
Selby, Mrs. C. S.....1916 Military, Port Huron
Serniak, Mrs. John.....5014 Lake Shore Rd., Port Huron
Sites, Mrs. Edgar C.....2704 Military Ave., Port Huron
Thomas, Mrs. C. F.....1131 Erie St., Port Huron
Tisdel, Mrs. James H.....(Military Service)
Townley, Mrs. Charles O.....2815 Military, Port Huron
Towser, Mrs. Glenn.....3180 Gratiot Ave., Port Huron
Treadgold, Mrs. Douglas....3205 Armour St., Port Huron
Ulmer, Mrs. Arthur H.....4476 Gratiot Ave., Port Huron
Van Rhee, Mrs. George.....3137 Couger St., Port Huron
Walker, Mrs. Sidney....5090 Lake Shore Rd., Port Huron
Wass, Mrs. Henry C.....923 N. Riverside, St. Clair
Wilson, Mrs. Norman.....Marine City

ST. JOSEPH COUNTY

Berg, Mrs. L. A.....E. South St., Sturgis
Blood, Mrs. J. V.....617 S. Main St., Three Rivers
Braham, Mrs. W. G.....105 N. Lakeview, Sturgis
Brunson, Mrs. A. E.....Mortimer St., Sturgis
Emory, Miss Blanche.....605 Wilson, Sturgis
Fiegel, Mrs. A. S.....500 Michigan Ave., Sturgis
Fortner, Mrs. R. J.....R.F.D. 1, Constantine
Jacobowitz, Mrs. John M.....222 West St., Three Rivers
Lamb, Mrs. Harry.....503 E. Chicago, Sturgis
Lee, Mrs. Frank.....Burr Oak
Lepard, Mrs. O. L.....606 E. Chicago Rd., Sturgis
O'Dell, Mrs. Charles.....302 East St., Three Rivers
O'Dell, Mrs. John H.....721 Elm, Three Rivers
Penzotti, Mrs. Stanley....402 S. Constantine, Three Rivers
Porter, Mrs. C. G.....307 N. Main, Three Rivers
Reed, Mrs. F. R.....412 Walnut, Three Rivers
Shaw, Mrs. G. D.....R.R. No. 2, Three Rivers
Sheldon, Mrs. John.....610 Cherry St., Sturgis
Storer, Mrs. William.....North Twin Beach, Howe, Ind.
Weisheit, Mrs. Hans.....200 Michigan, Sturgis
Zimont, Mrs. R. D.....435 White Pigeon Rd., Constantine

SANILAC COUNTY

Bennett, Mrs. William....Brown City
Blanchard, Mrs. Ernest....Deckerville
McCrea, Mrs. John....Marlette
Gift, Mrs. Weldon....Marlette
Hart, Mrs. Robert K.....21 S. Howard Ave., Croswell
Jayson, Mrs. Michael....Marlette
McGunegle, Mrs. K. T....Sandusky
Muir, Mrs. Neil....269 Howard Ave., Croswell
Seager, Mrs. M. Cole....Brown City
Tweedie, Mrs. G. E....Sandusky
Tweedie, Mrs. S. M....Sandusky
Winfield, Mrs. Raymond....Marlette

SHIAWASSEE COUNTY

Arnold, Mrs. A. L....R.R. 1, Ovid
Austin, Mrs. Eugene S.....635 North Ball St., Owosso
Bach, Mrs. Norman F.....1201 N. Washington St., Owosso
Bennett, Mrs. George W.....203 W. Main St., Elsie
Brown, Mrs. Richard C.....509 W. Williams St., Owosso
Brown, Mrs. Richard Jos.....915 W. King St., Owosso
Chipman, Mrs. Elwood M...502 W. Williams St., Owosso
Elliott, Mrs. Bruce R....Ovid
Graves, Mrs. James H.....221 E. Oliver St., Owosso
Greene, Mrs. I. W.....515 N. Washington St., Owosso
Hoshal, Mrs. Vern L....Durand
Hume, Mrs. H. A....R.F.D. No. 6, Owosso
Janci, Mrs. Julius.....213 East Mason St., Owosso
MacGregor, Mrs. John.....202 Jennett St., Owosso
McKnight, Mrs. E. R.....320 N. Washington St., Owosso
Merz, Mrs. W. T.....1018 N. Washington St., Owosso
Pochert, Mrs. R. C.....1254 N. Shiawassee St., Owosso
Richards, Mrs. Chester....Durand
Sahlmark, Mrs. Joseph.....207 N. Cedar St., Owosso
Slagh, Mrs. Earl N....Elsie
Weinkauf, Mrs. William.....415 W. Mack St., Corunna
Weston, Mrs. Claude....1306 N. Washington St., Owosso

TUSCOLA COUNTY

Ballard, Mrs. J. H....Cass City
Cook, Mrs. R....Akron
Dickerson, Mrs. W. W....Caro
Donahue, Mrs. T. H....Cass City
Flett, Mrs. Richard....Millington
Gilbert, Mrs. Donald....Mayville
Gugino, Mrs. Frank....Reese
Howlett, Mrs. R. R....Caro
Miles, Mrs. Edward....Caro
Merrill, Mrs. Elmer....Caro
Morris, Mrs. F. L....Cass City
Nigg, Mrs. H. L.....308 S. State St., Caro
Savage, Mrs. R. L....Caro
Starmann, Mrs. B....Cass City
Swanson, Mrs. E. C....Vassar

VAN BUREN COUNTY

Boothby, Mrs. Carl F....Hartford
Boothby, Mrs. Paul R....Lawrence
Buckborough, Mrs. M. W.....Ainsworth Dr., South Haven
Copeland, Mrs. Evan L....Decatur
Diephuis, Mrs. Bert....South Haven
Dillon, Mrs. Thomas J...8210 E. Michigan Rd., Paw Paw
Gano, Mrs. Avison....Bangor
Itzen, Mrs. J. F....South Haven
Kleber, Mrs. John A.....228 Erie St., South Haven
Loomis, Mrs. F. J....Paw Paw
McFadden, Mrs. R. I....Bloomingdale
Morgan, Mrs. Dale....South Haven
Penoyar, Mrs. C. L....South Haven
Saunders, Mrs. Kenneth....Holly
Spalding, Mrs. R. W....Gobles
Staggs, Mrs. Adelbert L....Hartford
Steele, Mrs. Arthur H....Paw Paw
Terwilliger, Mrs. Edwin H.....326 Michigan Ave., South Haven
Urist, Mrs. Martin J....South Haven
Young, Mrs. William R....Lawton

WASHTENAW COUNTY

Alexander, Mrs. John....788 Arlington Blvd., Ann Arbor
Allen, Mrs. Arthur.....5 Harvard Place, Ann Arbor
Atchison, Mrs. R. M.....422 S. Rogers, Northville
Barlow, Mrs. R. Craig.....1305 Arbor View, Ann Arbor
Barr, Mrs. A. S.....2701 Brockman Blvd., Ann Arbor
Bassow, Mrs. Paul....2220 Washtenaw Ave., Ann Arbor
Bauer, Mrs. Gerhard.....1612 Granger, Ann Arbor
Baum, Mrs. William.....15 Harvard Pl., Ann Arbor
Beebe, Mrs. H. M.....5 Ruthven, Ann Arbor
Beierwaltes, Mrs. Wm.....1204 Bydding Rd., Ann Arbor
Belote, Mrs. G. H.....1710 Morton, Ann Arbor
Belser, Mrs. Walter.....2101 Woodside Rd., Ann Arbor
Benz, Mrs. Alvin.....Nob Hill, Ann Arbor
Bosch, Mrs. H.....206 W. Dunlap, Northville
Botch, Mrs. E. S.....906 Spring St., Ann Arbor
Campbell, Mrs. Darell....1710 Shadford Rd., Ann Arbor
Carron, Mrs. D. P.....1707 Harding Rd., Ann Arbor
Clyde, Mrs. Ensign.....1298 Sheridan, Plymouth
Coller, Mrs. Frederick..2105 Wallingford Rd., Ann Arbor
Crook, Mrs. Clarence....2112 Wallingford Rd., Ann Arbor
Cummings, Mrs. H. H.....1020 Ferdon Rd.. Ann Arbor
Curtis, Mrs. A. C.....2122 Melrose Ave., Ann Arbor
DeJong, Mrs. R. N.....1526 Harding Rd., Ann Arbor
DeTar, Mrs. J. S.....Milan
DeWess, Mrs. M.....2215 Fuller St., Ann Arbor
Dingman, Mrs. Reed O.....1407 Lincoln Ave., Ann Arbor
Dolfin, Mrs. W. E.....1507 Ottawa Rd., Ann Arbor
Doorn, Mrs. H.....1110 Minor, Ann Arbor
Dryer, Mrs. C. K.....3033 Sophia, Wayne
Duff, Mrs. Ivan.....500 W. Keech St., Ann Arbor
Engleke, Mrs. Otto.....810 Hutchins Ave., Ann Arbor
English, Mrs. David.....405 Evergreen Dr., Ann Arbor
Evans, Mrs. T. N.....707 Henry, Ann Arbor
Falls, Mrs. Harold.....1525 Harding Rd., Ann Arbor
Fink, Mrs. George.....411 Linda Vista, Ann Arbor
Fralick, Mrs. Bruce.....2101 Belmont, Ann Arbor
Francis, Mrs. Thomas....1015 Berkshire Rd., Ann Arbor
French, Mrs. A. James.....409 Mark Hannah, Ann Arbor
Frost, Mrs. Lyle.....309 N. Washington, Ypsilanti
Frye, Mrs. Carl.....2025 Hill, Ann Arbor
Furstenberg, Mrs. A. C.....2240 Belmont, Ann Arbor
Ganzhorn, Mrs. E. C.....2705 Whitmore Lake Rd., Ann Arbor
Gates, Mrs. John.....715 Forest, Ann Arbor
Gotz, Mrs. Alexander.....709 Sunset Rd., Ann Arbor
Grawn, Mrs. Frank.....604 Pearl, Ypsilanti
Haas, Mrs. Reynold.....1421 Roxbury Rd., Ann Arbor
Hagerman, Mrs. G. W.....2124 Tuomy Rd., Ann Arbor
Hammond, Mrs. Walter.....302 Sunset St., Plymouth
Handorf, Mrs. H.....300 Wing Court, Northville
Hannum, Mrs. M. R.....Milan
Harrell, Mrs. R.....114 N. Division St., Ann Arbor

Harris, Mrs. Bradley.....206 S. Washington, Ypsilanti
Harris, Mrs. Scott.....305 S. Washington, Ypsilanti
Himler, Mrs. Leonard E.....1225 Fair Oaks Parkway, Ann Arbor
Hodges, Mrs. F. J.....5 Geddes Heights, Ann Arbor
House, Mrs. F. B.....1942 Steere Place, Ann Arbor
Howard, Mrs. S. C.....2009 Devonshire, Ann Arbor
Ideson, Mrs. Robert.....715 Sunset Rd., Ann Arbor
Ivanoff, Mrs. John.....2029 Ferdon, Ann Arbor
Jaarsma, Mrs. R. A.....3530 Elizabeth Rd., Ann Arbor
Kambly, Mrs. A. H.....1601 Leaird, Ann Arbor
Kemper, Mrs. John.....320 Juniper Lane, Barton Hills, Ann Arbor
Kennedy, Mrs. Ralph.....3416 Oakwood, Ann Arbor
Kenney, Mrs. J. A., Jr.....730 Haven, Ann Arbor
Kern, Mrs. Wheeler.....P.O. Box No. 7, Garden City
Kretschmar, Mrs. N. R.....715 South Forest, Ann Arbor
LaFever, Mrs. S. L.....2121 Melrose, Ann Arbor
Lugg, Mrs. Robert.....1309 S. University, Ann Arbor
Magee, Mrs. Kenneth R.....Ferdon Rd., Ann Arbor
Magielski, Mrs. John E.....404 Westwood, Ann Arbor
Maher, Mrs. J. A.....419 North Ingalls, Ann Arbor
Marshall, Mrs. Mark.....918 S. Forest Ave., Ann Arbor
Martin, Mrs. D. W.....402 Mansfield, Ypsilanti
Mathews, Mrs. Kenneth....322 N. State St., Ann Arbor
Maxwell, Mrs. J. H.....2139 Melrose Ave., Ann Arbor
Milford, Mrs. Albert.....1203 Whittier Rd., Ypsilanti
Muehlig, Mrs. G. F.....1520 White St., Ann Arbor
Nelson, Mrs. Roger.....Mark Hannah Pl., Ann Arbor
Nesbit, Mrs. Thomas.....Pittsfield Blvd., Ann Arbor
Newton, Mrs. C. W.....2120 Wallingford Rd., Ann Arbor
Nord, Mrs. Charles.....Ann Arbor
Obenauf, Mrs. Walter....Ypsilanti State Hosp., Ypsilanti
O'Connor, Mrs. Sylvester.....c/o University Hospital, Ann Arbor
Orebaugh, Mrs. John....315 Corrie Rd., R. No. 1, Ann Arbor
Parnall, Mrs. C. G.....Ann Arbor
Peet, Mrs Max M.....2030 Hill St., Ann Arbor
Pollard, Mrs. H. M.....2012 Vinewood, Ann Arbor
Rae, Mrs. James W.....580 Rock Creek Dr., Ann Arbor
Ratliff, Mrs. R. K.....231 Corrie Rd., Barton Hills, Ann Arbor
Riecker, Mrs. Herman..2109 Wallingford Rd., Ann Arbor
Riggs, Mrs. Harold.....2119 Devonshire Rd., Ann Arbor
Robinson, Mrs. Wm. D.....1611 Wells, Ann Arbor
Ross, Mrs. Howard....180 Underdown Rd., Barton Hills, Ann Arbor.
Ryan, Mrs. Ralph.....322 North State, Ann Arbor
Saunders, Mrs. Allen.....1008 Pauline, Ann Arbor
Sayre, Mrs. George.....1208 Whittier Blvd., Ypsilanti
Schneider, Mrs. Richard C.....1101 Pauline, Ann Arbor
Schoch, Mrs. H.....Princeton, Ann Arbor
Schumacher, Mrs. W. E.....1455 Stein Rd., Ann Arbor
Scovill, Mrs. Henry.....1313 W. Cross St., Ypsilanti
Seevers, Mrs. M. H.....620 Oxford Rd., Ann Arbor
Shaw, Mrs. John.....1900 Dexter Rd., Ann Arbor
Sheldon, Mrs. John.....2121 Tuomy Rd., Ann Arbor
Sink, Mrs. Emory.....1546 Packard St., Ann Arbor
Slocum, Mrs. George.....326 S. Division St., Ann Arbor
Spears, Mrs. Clarence.....1307 Pearl, Ypsilanti
Struthers, Mrs. J. N. P.....952 Grove Rd., Ypsilanti
Sturgis, Mrs. C. C.....609 Stratford Dr., Ann Arbor
Sweet, Mrs. Robert.....1304 Iroquois Pl., Ann Arbor
Taylor, Mrs. Wm.....1244 Ferdon St., Ann Arbor
Thieme, Mrs. E. T.....3 Geddes Heights, Ann Arbor
Towsley, Mrs. Harry A.....1000 Berkshire Rd., Ann Arbor
Waggoner, Mrs. R. W.....3333 Geddes Rd., Ann Arbor
Weinbaum, Mrs. Jack.....2388 Yost Blvd., Ann Arbor
Westover, Mrs. Charles....1375 West Ann Arbor Trail, Plymouth
Wicht, Mrs. P. J.....1385 W. Michigan Ave., Ypsilanti
Williams, Mrs. H. R.....1508 Granger Ave., Ann Arbor
Williamson, Mrs. F. B.....922 Pleasant Ave., Ypsilanti
Wilson, Mrs. James.....1801 Hermitage Rd., Ann Arbor
Woods, Mrs. J. J.....1900 Washtenaw, Ypsilanti
Wylie, Mrs. W. C.....3219 B. St., Dexter
Zerbi, Mrs. Victor M.....315 N. Adams, Ypsilanti

WAYNE COUNTY

(Note: *All addresses are Detroit, unless otherwise stated.*)

Adams, Mrs. Jas. R.....751 Morley Ct., Dearborn
Adams, Mrs. Vincent B.....18437 Pelkey (53)
Akroyd, Mrs. C. A.....19635 Shrewsbury (21)
Albrecht, Mrs. Herman F.....877 Chicago Blvd. (2)
Aldrich, Mrs. E. G.....14239 Chandler Park Dr. (13)
Alexander, Mrs. Eugene J.....24140 Wilson, Dearborn
Allard, Mrs. Andrew J.....4350 Haverhill (24)
Amos, Mrs. T. Grover.....2708 Woodstock Dr. (3)
Andries, Mrs. George H.....17365 Muirland (21)
Arehart, Mrs. B. W...534 Roslyn Rd., Grosse Pointe (30)
Ashe, Mrs. Stilson R.....12 Byfield Lane, Dearborn
Ashley, Mrs. L. Byron.....18050 Fairway Dr. (21)
Athay, Mrs. Roland M.....630 Merrick (2)
August, Mrs. Harry E.....26081 Hendrie Blvd., Huntington Woods
Axelson, Mrs. A. U.....17390 Fairway Dr. (21)
Babcock, Mrs. Lloyd K.....13901 Asbury Park (27)
Babcock, Mrs. Warren W.....18254 Oak Dr. (21)
Bagley, Mrs. Harry E.....7541 Oakman Blvd.
Bailey, Mrs. C. C.....12824 Broadstreet Ave. (38)
Bailey, Mrs. William A.....20924 W. Outer Dr., Dearborn
Barnett, Mrs. Morton.....18295 Oak Dr. (21)
Barone, Mrs. C. J.....51 Eason Ave., Highland Park (3)
Barone, Mrs. Jerry.....19785 Mansfield (35)
Barrett, Mrs. Wyman D.....91 Touraine, Grosse Pointe Farms (36)
Bartemeier, Mrs. Leo.....Seton Institute, Baltimore, Md.
Baumgarten, Mrs. E. C.....1062 Lochmoor, Grosse Pointe (36)
Bauer, Mrs. Lester E.....1317 Bishop Rd., Gr. Pte. (30)
Beach, Mrs. W.....281 Kenwood Ct., G. P. Farms, (36)
Beam, Mrs. A. Duane.....406 Lincoln, G. P. (30)
Beamer, Mrs. George.....15834 Longmeadow, Dearborn
Behan, Mrs. Robert C.....8123 E. Lafayette (14)
Bell, Mrs. J. Kenner.....49 Rhode Island Ave., Highland Park (3)
Bentley, Mrs. Neil I.....1160 Chicago Blvd. (2)
Berlien, Mrs. Ivan C.....1001 E. Jefferson Ave. (7)
Best, Mrs. Edward.....1229 Three Mile Dr., G. P. (30)
Berthea, Mrs. Hardee.....279 Kenwood Ct., Grosse Pte. Farms (36)
Bicknell, Mrs. E. A.....13225 Birwood (38)
Bielawski, Mrs. John G.....8124 East Morrow Circle (4)
Birkhill, Mrs. Frederick Ross.....19510 Roslyn Rd. (21)
Bird, Mrs. H. Waldo.....109 Moran Rd., Grosse Pte. Farms (36)
Bittrich, Mrs. N. M.....7474 LaSalle Blvd (6)
Blain, Mrs. Alexander.....1028 Berkshire Rd., G. P. (30)
Blodgett, Mrs. W. H.....535 Overhill Rd., Birmingham
Bolstad, Mrs. Donald.....1835 N. Melborn, Dearborn
Bookmeyer, Mrs. Ralph H.....19305 Afton Rd. (3)
Bracken, Mrs. A. H.....7540 Oakman Blvd., Dearborn
Brines, Mrs. Osborne A.....1415 Parker, Apt. 266 (14)
Bringard, Mrs. Elmer.....18110 Fairfield Ave. (21)
Bristol, Mrs. William R.....6142 Bishop (24)
Brooks, Mrs. Clark D.....17196 Fairway Dr. (21)
Brosius, Mrs. William L.....16150 Sorrento (35)
Brough, Mrs. Glen A.....25519 Meridian Rd., Grosse Ile
Brown, Mrs. A. O.....46 Oakdale Blvd., Pleasant Ridge
Brown, Mrs. Gordon T.....8355 E. Outer Dr. (13)
Brush, Mrs. Brock E.....22313 Cherryhill, Dearborn
Bryan, Mrs. John B.....2181 Sunnyknoll, Berkley
Budd, Mrs. Alex S.....440 Lake Park Dr., Birmingham

Buerki, Mrs. Robin C.....201 Lake Shore, G. P. (36)
Buesser, Mrs. Frederick G.....8100 E. Jefferson (14)
Burgess, Mrs. C. M.....49 Oxford, Pleasant Ridge
Burke, Mrs. R. M.....580 University Pl., Grosse Pte. (30)
Burnham, Mrs. David C.....16167 Glastonbury Rd. (19)

Caldwell, Mrs. John R.....9580 Hemingway (28)
Caputo, Mrs. Joseph M.....22575 Nona, Dearborn
Calkins, Mrs. H. Neill.....14970 Robson (27)
Callaghan, Mrs. Thomas T.....14895 Stahelin Ave. (23)
Callery, Mrs. A. L.....5959 Bishop Rd. (24)
*Campbell, Mrs. Mac D.....3 Sylvan Rd., Pleasant Ridge
Candler, Mrs. Clarence L.....1690 Faircourt, Grosse Pte. Woods (36)
Carpenter, Mrs. Claire H.....18701 Snowden Ave. (35)
Carrick, Mrs. Lee.....506 Lakeshore Lane, Grosse Pte. Woods (36)
Carter, Mrs. John M.....18900 Fairway Dr.
Carter, Mrs. Leland F.....750 Middlesex Rd. (30)
Cavell, Mrs. Rachell.....15604 Woodland Ave., Dearborn
Chall, Mrs. Henry G.....2941 W. McNichols (21)
Chance, Mrs. J. H.....12731 Dartmouth, Oak Park (37)
Chapin, Mrs. Sidney.....425 Golf Crest Dr., Dearborn
Chester, Mrs. William P.....2916 Seminole (14)
Chipman, Mrs. Willard A.....14613 Rutland Rd. (27)
Christensen, Mrs. C. A.....7876 Hartwell Ave., Dearborn
Christopher, Mrs. James G.....9515 W. Outer Dr. (23)
Clark, Mrs. H. E.....10064 Ludlow, Huntington Woods
Clarke, Mrs. Robert B.....489 Fisher Rd., G. P. (30)
Clifford, Mrs. T. P.....4355 Glendale Ave. (38)
Cole, Mrs. James E.....2747 Oakman Ct. (16)
Colvin, Mrs. Leslie T.....18470 Scarsdale (28)
Connelly, Mrs. R. C.....1360 Three Mile Dr., G. P. (30)
Connolly, Mrs. Paul J.....16778 Westmoreland Ave. (19)
Connors, Mrs. John J.....17126 Muirland Ave. (21)
Cook, Mrs. James C.....5 Fairmount Ct., Dearborn
*Cooksey, Mrs. Norton J.....62 West Kirby (2)
Cooksey, Mrs. Warren B.....19510 Stratford Dr. (21)
Cooper, Mrs. Benjamin F.....1124 Berkshire, G. P. (30)
Cooper, Mrs. Edmond L.....1507 W. Boston Blvd. (6)
Corbett, Mrs. John J.....57 Merriweather Rd., Grosse Pte. Farms (36)
Costello, Mrs. Russell T.....2850 Pine Lake Dr., Pontiac
Cotant, Mrs. John F.....15717 Rosemont (23)
Cotruro, Mrs. Louis D.....4410 Burns (14)
Crook, Mrs. C. L.....60 Colorado, Highland Park (3)
Croushore, Mrs. James E.....2906 E. Jefferson (7)
Cusick, Mrs. Paul L.....17575 Oak Dr. (21)

Darling, Mrs. Charles E.....14401 Glastonbury Rd. (23)
Darling, Mrs. Milton A.....8100 LaSalle Blvd. (6)
Davidson, Mrs. Harry O.....24 Elm Park Blvd., Pleasant Ridge
Davies, Mrs. Windsor S.....1013 Audubon, G.P. (36)
Dawson, Mrs. Wirt A.....25951 Avondale Rd., Inkster
DeFever, Mrs. C. R...1113 Kensington Rd., G. Pte. (30)
DeNike, Mrs. A. James.....2906 E. Jefferson (7)
DeSpelder, Mrs. R. E.....1452 Yorkshire, Grosse Pte. (30)
Devine, Mrs. Herbert W.....1315 Harvard, G. Pte (30)
Dill, Mrs. J. Lewis.....18615 Birchcrest Ave. (21)
Dimond, Mrs. George C.....6853 Orchard, Dearborn
Dixon, Mrs. Robert K.....201 East Kirby (2)
Doering, Mrs. Wendell R.....27489 Lathrup, Birmingham
Dolgoff, Mrs. Sidney.....3205 Roosevelt, Dearborn
Donald, Mrs. Douglas.....8120 E. Jefferson (14)
Dorian, Mrs. Alan L.....3751 Brewster Rd., Dearborn
Dorsey, Mrs. John M.....65 Moss, Highland Park (3)
Doub, Mrs. Howard P.....18234 Wildemere Ave. (21)
Downer, Mrs. Ira G.....435 Lodge Dr. (14)
Drake, Mrs. Ellert H.....31650 Curtis Ave., Livonia
Draves, Mrs. Edward F.....14541 Grandmont (27)
Dubois, Mrs. Paul W.....630 Merrick Ave. (2)
Dudek, Mrs. John J.....17166 Parkside (21)
Dumke, Mrs. Paul R.....544 Middlesex Blvd., G. Pte(30)
Dunlap, Mrs. Henry A.....505 Lake Pointe, G. P. (30)

*Signifies wife of an associate member.

Dunn, Mrs. Cornelius E.....3496 Burns Ave. (14)
Durham, Mrs. Everett W.....844 N. Highland, Dearborn
Dutcher, Mrs. Dwight J.....21742 Elkhart, G. Pte (36)
Duwe, Mrs. Frank A.....15425 Manor (21)
Dwyer, Mrs. F. W.....740 Indianwood Rd., Lake Orion

Eldredge, Mrs. Edward F.....1156 Harvard (30)
Eisman, Mrs. Clarence H.....1121 Whittier Rd. (30)
Elvidge, Mrs. R. J.....29043 Millbrook Rd., Farm. Twp., Farmington
Ensign, Mrs. Dwight C.....Franklin
Ewing, Mrs. C. H.....526 University Pl., G. P. (30)

Fallis, Mrs. L. S.....2474 Chicago Blvd. (6)
Felcyn, Mrs. W. G.....2091 W. Grand Blvd. (8)
Fellers, Mrs. R. L.....4984 Ridgewood Ave. (4)
Fenton, Mrs. Edwin.....14831 Warwick Rd. (23)
Fenton, Mrs. R. F.....18469 Hillcrest Blvd., Birmingham
Fenton, Mrs. Stanley C.....5092 Yorkshire Ave. (24)
*Fentress, Mrs. Vance.....5103 Ridgewood (4)
*Ferris, Mrs. G. N.....17196 Murray Hill (19)
Fisher, Mrs. C. L.....791 University Pl., G. P. (30)
Fisher, Mrs. George S.....594 Seyburn (14)
Fisher, Mrs. James M.....754 Rivard Blvd., G. P. (30)
Fitzgerald, Mrs. James M.....16838 Huntington (19)
Flaherty, Mrs. N. W.....24315 Fairmount Dr., Dearborn
Flaherty, Mrs. Samuel A.....14015 Warwick (23)
Ford, Mrs. George A.....18934 Fairfield Ave. (21)
Ford, Mrs. Slyvester.....20170 Lichfield Rd. (21)
Fordell, Mrs. Frank.....441 S. Oakwood Blvd. (25)
Foster, Mrs. William L.....15316 Piedmont (23)
Freeman, Mrs. Donald K.....926 University Pl., Grosse Pointe (30)
Freeman, Mrs. Michael W.....1810 Wellesley Dr. (3)
Freitas, Mrs. E. L.....19914 Fairway, Grosse Pointe Woods
Fryfogle, Mrs. James D.....17399 Edinborough Rd. (19)

Ganschow, Mrs. John H.....10025 Nadine, Huntington Woods
Gardner, Mrs. L. W.....18782 Glenwood, Birmingham
Gardner, Mrs. Max L.....17011 E. Jefferson, Grosse Pointe (30)
Gariepy, Mrs. L. J.....14590 Abington Rd. (27)
Gaston, Mrs. H. B.....7501 W. Morrow Circle, Dearborn
Gehring, Mrs. H. W.....17607 Magnolia Parkway (35)
Geib, Mrs. L. O.....1411 Berkshire, G. Pte. Park (30)
Gerondale, Mrs. E. J.....15000 Dexter Blvd. (21)
Gigante, Mrs. Nicola.....1728 Seminole (14)
Gillespie, Mrs. Stephen M.....1638 DaCosta, Dearborn
Gittins, Mrs. Perry.....20210 Renfrew Rd. (21)
Glowacki, Mrs. Ben F.....4753 W. Outer Dr. (35)
Gordon, Mrs. J. Whitlock.....12700 Mendota (4)
Gottschalk, Mrs. F. W...1000 Whitemore Rd., Apt. 15 (3)
Goux, Mrs. Raymond S.....17566 Muirland Ave. (21)
Grace, Mrs. Joseph M.....17505 Parkside (21)
Grain, Mrs. Gerald O.....17556 Oak Dr. (21)
Granger, Mrs. George R.....2243 Iroquois Ave. (14)
Gravelle, Mrs. Lawrence J.....1156 Yorkshire Rd. Grosse Pte. Park (30)
Greenlee, Mrs. William T.....15239 Cedargrove (5)
Griffin, Mrs. R. J.....20227 Lancaster, Grosse Pointe (36)
Grossman, Mrs. Sol C.....17391 Santa Barbara (21)
Guerrero, Mrs. Jose.....4285 Glendale (4)
Gurdjian, Mrs. E. S.....19385 Renfrew Rd. (21)
Guyton, Mrs. Jack S.....402 University Pl., Grosse Pointe (30)

Hall, Mrs. E. Walter.....19210 Bretton Dr. (23)
Haitinger, Mrs. K. S.....844 Whittier, Grosse Pointe (30)
Hamil, Mrs. Brenton M.....12 Adams Lane, Dearborn
Hamilton, Mrs. Quentin P.....16287 Mendota (21)
Hansen, Mrs. Frederick E.....120 Glynn Ct., Apt. 700 (2)
Harm, Mrs. Winfred B.....16260 Cherrylawn Ave. (21)
Harper, Mrs. Jessie T.....2188 Seminole (14)
Harrington, Mrs. Frank L.....16821 Stout (19)
Harris, Mrs. Harold H.....7350 Oakman, Dearborn

Hartman, Mrs. Frank W.....7661 LaSalle Blvd. (6)
Hasley, Mrs. Clyde K.....2490 Longfellow Ave. (6)
Hassig, Mrs. W. W.....443 Maison, Grosse Pointe (36)
Hastings, Mrs. Orville J.....10427 E. Outer Dr. (24)
Hauser, Mrs. I. Jerome.....1980 Strathcona Dr. (21)
Hauser, Mrs. John E.....18243 Birchcrest (21)
Havers, Mrs. Howard.....271 Kenwood Ct., G. P. (36)
Hawkins, Mrs. James W.....14180 Woodmont (27)
Heldt, Mrs. Richard F.....18491 Ardmore (35)
Heldt, Mrs. T. J.....179 Poplar Park, Pleasant Ridge
Henderson, Mrs. Leslie T.....832 N. Renaud, G. P. (36)
Herbst, Mrs. Harold B.....20482 Ardmore (36)
Herwick, Mrs. John T.....18731 Glenwood, Birmingham
Hess, Mrs. Murray W.....23860 Seneca, Oak Park
Heyner, Mrs. S. A.....3424 Oakman Blvd. (4)
Hickey, Mrs. Joseph.....24346 Fairmount Dr., Dearborn
Hillenbrand, Mrs. Alfred E.....675 Fisher Rd. (30)
Hodges, Mrs. Frank J.....7407 Oakman Blvd., Dearborn
Hodges, Mrs. Jason.....1200 S. Oxford Rd., Grosse Pte. Woods (36)
Hodgkinson, Mrs. Paul C.....17546 Meadowwood, Birmingham
Hoffman, Mrs. Edwin S.....14877 Warwick (23)
Hoops, Mrs. George B.....18415 Warrington (21)
Horton, Mrs. R. H.....17375 Fairfield (21)
Horvath, Mrs. James J.....15507 Ohio (38)
Howard, Mrs. Austin Z.....15492 Ashton Rd. (23)
Howell, Mrs. James T.....27907 E. California Dr., Birmingham
Howlett, Mrs. Howard T.....20026 Shrewsbury (21)
H'Romadko, Mrs. Louis.....Martel Dr., Bloomfield Hills
Hull, Mrs. LeRoy W.....20115 Canterbury (21)
Huminski, Mrs. T. S.....1232 Devonshire, Grosse Pte. Park (30)
Hummel, Mrs. A. R.....1020 Three Mile Dr.
Hunt, Mrs. Theodore H.....10095 E. Outer Dr. (24)
Hurd, Mrs. Brooks H.....20187 Schaefer Rd. (35)
Husband, Mrs. Charles W.....19450 Argyle Crescent (3)
Husband, Mrs. Raymond C.....18715 Prairie (21)

Iacobell, Mrs. Peter H.....8080 E. Lantz (34)
Igna, Mrs. E. J.....12315 Broadstreet (4)
Insley, Mrs. Stanley W.....12880 Archdale (27)
Irwin, Mrs. William A.....2130 Iroquois (14)

Jaekel, Mrs. C. N.....443 Lexington, Grosse Pointe Farms (36)
Jaffar, Mrs. Donald J.....630 Merrick (2)
Jahsman, Mrs. William E.....Box 131, Franklin
Jarvis, Mrs. Harold F.....14066 Linnhurst (5)
Jaynes, Mrs. Richard V.....14871 Heyden (23)
Jensen, Mrs. V. W.....8230 Littlefield (28)
Jeffries, Mrs. B.....1010 Harvard, Grosse Pointe (30)
John, Mrs. Hubert R.....31 Oakland Park Blvd., Pleasant Ridge
Johnson, Mrs. Ralph A.....2115 Iroquois Ave. (14)
Johnson, Mrs. Thomas D.....16800 Stout (19)
Johnson, Mrs. Vernon P.....502 Pemberton, G. P. (30)
Johnson, Mrs. Vincent C.....345 Lodge Drive (14)
Johnston, Mrs. Wm. E.....Lee Plaza, 2240 W. Grand Blvd. (8)
Joinville, Mrs. E. V.....3879 Riverside Dr., Windsor, Ontario
Jones, Mrs. Roy D.....7747 W. Seven Mile Road (21)
Jordan, Mrs. R. G.....12791 E. Outer Drive (24)
Joyce, Mrs. Stanley .....2040 W. McNichols (3)
Jury, Mrs. Donald B.....4 Oxford Blvd., Pleasant Ridge

Kasper, Mrs. Joseph A.....1428 Buckingham Grosse Pointe (30)
Kaump, Mrs. Donald H.....16020 Warwick (23)
Keane, Mrs. Wm. E.....1007 Harvard Road, G. P. (30)
Kehoe, Mrs. Henry J.....91 Renaud Rd., Grosse Pte. Farms (36)
Keim, Mrs. Harther L...369 University Place, G. P. (30)
Kelley, Mrs. Frank J.....440 Lothrop Rd., Grosse Pte. Farms (36)
*Kelly, Mrs. Lawrence J.....5315 Bedford Rd. (24)
Kennary, Mrs. James M.....2250 Iroquois (14)
Killins, Mrs. Charles G.....7710 E. Jefferson Ave. (14)
King, Mrs. Edward D.....2325 W. Grand Blvd. (8)
King, Mrs. Melbourne J.....16021 Warwick (23)
Knaggs, Mrs. Charles W.....1209 Yorkshire, G. P. (30)
Knighton, Mrs. Robert S.....27486 Lathrup St. Birmingham
Koebel, Mrs. R. H.....15701 Windmill Pte. Dr., Grosse Pointe Park (30)
Kokowicz, Mrs. R. J.....1151 Buckingham
Krynicki, Mrs. Francis X.....17127 Muirland (21)
Kossayda, Mrs. Adam W.....22331 Wilson, Dearborn
Krabbenhoft, Mrs. Kenneth L.....481 E. Lewiston Ferndale (20)
Kulaski, Mrs. Chester H...7500 E. Robinwood Ave. (34)
Kullman, Mrs. H. J.....Veterans Administration Hospital, Dearborn

LaMarche, Mrs. Norman O.....4139 Wakefield Rd., St. Johns Woods, Berkley
Lampman, Mrs. H. H.....42 Puritan Ave., Highland Park (3)
Lang, Mrs. Ernest F.....280 Cloverly Rd., Grosse Pointe (36)
Lange, Mrs. Anthony H.....2211 Burns Ave. (14)
Laning, Mrs. George M.....2025 W. Six Mile Rd., Highland Park (3)
Leibinger, Mrs. Henry R.....511 Barrington Road Grosse Pointe (30)
Lemon, Mrs. Bruce K.....8259 Meyers Road (28)
Lepley, Mrs. Fred O.....1125 Three Mile Drive, Grosse Pointe (30)
Leszynski, Mrs. Joseph S.....8120 E. Jefferson, Apt 2N (14)
Liddicoat, Mrs. Arthur G.....18300 Bretton Drive (23)
Lightbody, Mrs. James J.....195 Pipe Blvd. (15)
Lignell, Mrs. Rudolph W.....18109 San Juan (21)
Lilly, Mrs. Charles J.....16649 Princeton (21)
Livingood, Mrs. Clarence S.....2950 Iroquois (14)
Lockwood, Mrs. Bruce C.....16911 Baylis (21)
Lofstrom, Mrs. James E.....265 Williams, Grosse Pte. Farms (36)
Longo, Mrs. Salvatore S...918 Barrington Rd., G. P. (30)
Longyear, Mrs. Harold W.....2082 W. Long Lake Rd., Bloomfield Hills
Loranger Mrs. Clifford B.....888 Lakeshore Rd,. G. P. (30)
Loucks, Mrs. R. E.....29915 13 Mile Road, Farmington
Lovas, Mrs. William.....820 S. Lafayette, Dearborn
Lowrie, Mrs. William L.....548 Southfield, Birmingham
Luce, Mrs. Henry A.....3421 Seminole (14)
Lutz, Mrs. Earl F.....6178 Lantern Lane, Foxcroft, Birmingham
Lynn, Mrs. Harvey D.....18285 Birchcrest Drive (21)

MacFarlane, Mrs. Howard W.....3476 Seminole (14)
MacGregor, Mrs. William W.....6320 W. Surrey, Foxcroft, Birmingham
Mackersie, Mrs. William C.....18205 Roselawn (21)
MacQueen, Mrs. Malcolm D.....2165 Burns Ave. (14)
Maczewski, Mrs. John E.....1357 Sunningdale, Grosse Pte. Woods (36)
Malone, Mrs. Richard S.....16879 St. Paul, G. P. (30)
Maloney, Mrs. John A.....22635 W. 10½ Mile Rd., Rte. 3, Box 11, Birmingham
Mancuso, Mrs. Vincent S.....962 E. Grand Blvd. (7)
Marsh, Mrs. Alton R.....15696 Woodland Ave.. Dearborn
Martin, Mrs. Peter A.....17185 Muirland (21)
Martmer, Mrs. Edgar E.....693 Washington Rd., Grosse Pointe (30)
May, Mrs. Frederick T.....16637 Parkside (21)
McAlonan, Mrs. William T.....630 Merrick Ave. (2)
McClellan, Mrs. Gustave L.....2046 W. Boston Blvd. (6)
McColl, Mrs. Clarke M.....19701 Chesterfield (21)
McCormick, Mrs. Colin C.....24352 Rockford Dr., Dearborn
McCormick, Mrs. Frank T.....859 Longfellow (2)

McDonald, Mrs. Angus L.....1247 Berkshire, Grosse Pointe (30)
McDonald, Mrs. Allan W.....15015 Ward (27)
McDonald, Mrs. William G.....9347 Becker, Allen Park
McDowell, Mrs. Douglas B.....Wayne Co. General Hospital, Eloise
McEvitt, Mrs. William G.....1140 W. Boston Blvd. (2)
McGraw, Mrs. Arthur B.....340 Lakeland, Grosse Pointe (30)
McIntyre, Mrs. William B.....1233 Audubon Road (30)
McKinnon, Mrs. John D.....147 Waverly (3)
McKnight, Mrs. Robert E.....19818 Lesure (35)
McRae, Mrs. Donald H.....259 W. Grand Blvd. (16)
Meek, Mrs. Stuart E.....13020 Kilbourne (13)
Metes, Mrs. John S.....1261 Fairholme Road, Grosse Pointe (36)
Merrill, Mrs. William O.....W. Long Lake Road, Bloomfield Hills
Michael, Mrs. Michael J.....938 S. Renaud Rd., Grosse Pointe (36)
Mitchell, Mrs. C. Leslie.....34 Hendrie Lane, Grosse Pointe (36)
Molnar, Mrs. Stephen K.....434 S. Highland, Dearborn
Molnar, Mrs. Joseph G.....14890 Glastonbury (23)
Monto, Mrs. Raymond W.....16845 Lauder (35)
Morley, Mrs. Harold V.....101 Elm Park Blvd., Pleasant Ridge
Monson, Mrs. Robert C.....1070 N. Renaud, Grosse Pointe (36)
Moroun, Mrs. S. J.....203 Lakeland, Grosse Pointe (30)
Murphy, Mrs. Robert T.....19 Oakland Park, Pleasant Ridge
Murray, Mrs. William A.....11841 Ohio (4)
Musselman, Mrs. Merle M...Wayne Co. General Hospital, Eloise
Myers, Mrs. Dan W.....1150 Bedford Road, G. P. (30)

Nahigian, Mrs. Russell.....18914 Wisconsin (21)
Nehra, Mrs. John M.....662 Renaud Rd., Grosse Pointe (36)
Nelson, Mrs. Darwin M.....63 Ridge Rd., Grosse Pointe (36)
Nickerson, Mrs. I. D.....6245 Golfview Drive, Birmingham
Norton, Mrs. A. B.....18615 Muirland (21)
Noshay, Mrs. William C.....25505 Wareham Dr., Huntington Woods
Novy, Mrs. Robert L.....2910 Iroquois (14)

Oetting, Mrs. Edward M.....2923 Iroquois (14)
Ohmart, Mrs. Galen B.....2150 Iroquois (14)
Olmsted, Mrs. George S.....19766 Steel (35)
Olmsted, Mrs. William R.....7434 Churchill Ave. (6)
Olson, Mrs. James A.....19 Norwich Road, Pleasant Ridge
O'Rourke, Mrs. Paul V.....700 Seward (2)
Ostrowski, Mrs. Arthur Z.....20127 Sheffield (21)
Owen, Mrs. Clarence I.....1544 Vinewood (16)

Parcells, Mrs. Frank H.....1014 Buckingham, Grosse Pointe (30)
Parsons, Mrs. John P.....808 Grand Marais, G. P. (30)
Perkin, Mrs. Frank S.....1049 Yorkshire Rd., G. P. (30)
Peterman, Mrs. Earl A.....19515 Cumberland Way (3)
Peterson, Mrs. Robert A.....17581 Prest (35)
Pichette, Mrs. J. W.....627 Morley Court, Dearborn
Pickard, Mrs. O. W.....20208 Lichfield (21)
Pietra, Mrs. Alex W.....9405 E. Outer Drive (13)
Poirier, Mrs. R. A.....425 Bryn Mawr, Birmingham
Porretta, Mrs. F. S.....8156 Normile (4)
Posch, Mrs. Joseph L.....853 Brys Drive, Grosse Pte. Woods (36)
Potter, Mrs. L. S.....287 Merriweather, Grosse Pte. Farms (36)
Pratt, Mrs. Jean P.....18910 Fairway Drive (21)
Priborsky, Mrs. Benjamin H.....3005 Iroquois (14)
Price, Mrs. Hazen.....18605 Birchcrest (21)
Priest, Mrs. Robert J.....9312 Faust (28)
Procailo, Mrs. A. B.....4125 Seymour, Dearborn
Purcell, Mrs. Frank H.....869 Edgemont Park, G. P. (30)
Ratigan, Mrs. Carl S.....16121 Longmeadow, Dearborn
Rebuck, Mrs. John W.....16955 Beverly Road, Birmingham
Redding, Mrs. G. Lowell.....1104 Claremont, Dearborn (7)
Reed, Mrs. H. Walter.....8141 Dexter Blvd. (6)
Reiss, Mrs. M. V.....56888 W. Nine Mile Road
Reive, Mrs. David L.....16002 Oak Drive (21)
Rennell, Mrs. Leo P.....18222 Fairfield (21)
Reveno, Mrs. William S.....19398 Stratford Road (21)
Reyner, Mrs. Clarence E.....19999 Stratford Road (21)
Reynolds, Mrs. R. P.....17521 Hamilton Dr. (3)
Rhoades, Mrs. Francis P.....272 Ashland (15)
Robb, Mrs. J. Milton....315 Lakeland, Grosse Pointe (30)
Robinson, Mrs. Frederic L.....100 S. Waverly, Dearborn
Roman, Mrs. S. J.....25531 Avondale, Inkster
Ross, Mrs. Donald G.....617 Neff, Grosse Pointe (30)
Rowda, Mrs. Michael S.....7 Cambridge Road, Pleasant Ridge
Ruedemann, Mrs. Albert D.....1018 Three Mile Dr., Grosse Pointe (30)
Runge, Mrs. E. F.....14 Abbott Lane, Dearborn
Rupp, Mrs. Jacob R.....5538 Cass (2)

Sadler, Mrs. Henry, Jr.....502 Lincoln Rd., G. P. (30)
Sage, Mrs. Thomas.....379 St. Clair, G. P. (30)
Sapala, Mrs. M. Andrew.....13021 Mackenzie Ave. (28)
St. Louis, Mrs. R. J.....10909 W. Jefferson Ave., River Rouge (18)
Sawyer, Mrs. Harold F.....22 Cambridge Blvd., Pleasant Ridge
Scarney, Mrs. Herman D.....5400 Pontiac Trail Rte. 5, Pontiac
Schillinger, Mrs. Harold K.....4838 Nickel, Dearborn
Schimek, Mrs. Robert A.....40 California (3)
Schlafer, Mrs. Nathan H.....18420 Wildemere (21)
Schmalz, Mrs. John D.....17656 Grandville (19)
Schmidt, Mrs. Werner F.....15011 Rossini Drive (5)
Schneck, Mrs. Robert J.....2129 Iroquois (14)
Schuknecht, Mrs. Harold F.....500 Neff Road, G. P. (30)
Schulte, Mrs. Carl H.....20171 Renfrew (21)
Schweigert, Mrs. C. F.....12185 E. Outer Drive (24)
Seeley, Mrs. J. B.....7870 Oakman Blvd., Dearborn
Sellers, Mrs. Charles W.....2051 Chicago Blvd. (6)
Sellers, Mrs. Graham.....3371 Sherbourne Road (21)
Sewell, Mrs. George.....4365 Clements (4)
*Sewell, Mrs. George R.....350 Elmhurst Ave., Highland Park (3)
Sewell, Mrs. Guy W.....352 Elmhurst Ave., Highland Park (3)
Sharp, Mrs. Elwood A.....635 Neff Road, G P.. (30)
Sharrer, Mrs. Charles H...1133 Grayton Road, G. P. (30)
Sherman, Mrs. Wm. L.....201 E. Kirby Ave. (2)
Sherrin, Mrs. Edgar.....32 Oakland Park Blvd., Pleasant Ridge
Shipley, Mrs. Richard E.....14201 Woodmont (27)
Shreve, Mrs. Alfred J.....7 Amherst Lane, Dearborn
Sieber, Mrs. E. H.....5 Byfield Lane, Dearborn
Siefert, Mrs. William A.....15920 Glastonbury Road (23)
Sigler, Mrs. John W.....1356 Greenlawn, Birmingham
Sinclair, Mrs. James W.....21806 Moross Road (36)
Singer, Mrs. Floyd W.....24441 Emerson, Dearborn
Sippola, Mrs. George W.....13603 LaSalle Blvd. (6)
Slaughenhaupt, Mrs. J. G.....16887 Lawton (21)
Slevin, Mrs. John G., Jr.....1132 Whittier Rd., Grosse Pte. Park (30)
Sly, Mrs. Robert F.....22213 Tenny St., Dearborn (8)
Smith, Mrs. F. Janney.....2405 Burns (14)
Smith, Mrs. J. A.....U. S. P. H. S. Hospital, Windmill Pointe Dr. (15)
Somers, Mrs. Donald C.....4205 Valley Forge, Birmingham, Rte. 1
Sonda, Mrs. L. Paul.....8625 Marygrove (21)

Spademan, Mrs. L. C.....484 Warren Court, Birmingham
Spalding, Mrs. Edward D.....214 Cloverly, Grosse Pte. Farms (36)
Stapleton, Mrs. Wm. J.....201 E. Kirby, Apt. 404 (2)
Stefani, Mrs. E. L.....18600 Birchcrest Drive (21)
Steinbach, Mrs. Henry B.....411 Lakeland, G. P. (30)
Stellhorn, Mrs. C. E.....16589 Warwick (19)
Sterling, Mrs. Robert R.....52 Oxford Road, Pleasant Ridge
Stirling, Mrs. Alex M.....1005 Kensington, Grosse Pointe (30)
Stockwell, Mrs. Benjamin W.....192 Lothrop Rd., Grosse Pte. Farms (36)
Stockwell, Mrs. Glen W.....10210 Second Blvd., Apt. D-2 (2)
Stokfisz, Mrs. Thaddeus....7025 Oakman Blvd., Dearborn
Stone, Mrs. Dayton.....641 Covington Road (3)
Straith, Mrs. Claire L.....19490 Parkside Road (21)
Straith, Mrs. Richard E.....38 Oxford Rd., Pleasant Ridge
Strand, Mrs. Martin E.....451 Goff Crest. Dearborn
Sugar, Mrs. David I.....18140 San Juan (21)
Summers, Mrs. William S.....18456 Wildemere (21)
Swanson, Mrs. Robert G.....160 Beaupre Rd., Grosse Pte. Farms (36)
Swartz, Mrs. Fred.....1137 Balfour Road, G. P. (30)

Tenerowicz, Mrs. R. G.....1629 Lincolnshire Rd. (3)
Texter, Mrs. Elmer C.....2990 Seminole (14)
Thumann, Mrs. Robert C.....666 Washington Rd., G. P. (30)
Toaz, Mrs. Allison B.....2270 Edison (6)
Townsend, Mrs. Frank M.....15231 Windmill Pointe Dr., Grosse Pointe (30)
*Trafas, Mrs. Peter C.....7475 Woodrow Wilson (6)
Tremain, Mrs. Harold.....19700 Steel Ave., (35)
Truba, Mrs. Paul K.....8323 Ohio (4)
Turcotte, Mrs. Vincent J.....545 Lakeland, G. P. (30)
Tuynman, Mrs. Peter E.....18781 Dolores, Lothrop Village, Birmingham

Umphrey, Mrs. C. E.....19161 Warrington Drive (21)

Van Rhee, Mrs. George.....3137 Conger St., Port Huron
Van Riper, Mrs. Steven L.....1490 Iroquois (14)
Vosler, Mrs. Albert E.....222 Moran Road, Grosse Pte. Farms (36)

Walker, Mrs. Roger V.....1507 Iroquois (14)
Walker, Mrs. Roger V., Jr.....4324 Biddle, Wayne
Wainstock, Mrs. Michael A...18925 Wildemere Ave. (21)
Walter, Mrs. Floyd J.....15464 Ferguson (27)
Warden, Mrs. H. F.....7605 Oakman Blvd., Dearborn
Warren, Mrs. Wadsworth.....2942 Burns (14)
Watson, Mrs. Douglas J.....14500 Piedmont Road (23)
Watson, Mrs. J. Edwin.....Pembroke Drive, Bloomfield Hills
Watts, Mrs. John C.....7740 Oakman, Dearborn
Watts, Mrs. Joseph.....12944 Archdale Ave. (27)
Weaver, Mrs. Clarence E.....18962 Warrington Dr. (21)
Weaver, Mrs. Delmar F.....1100 Bishop Road, Grosse Pointe (30)
Weber, Mrs. Karl W.....674 N. Renaud, Grosse Pointe (36)
Weed, Mrs. Milton R.....1997 E. Grand Blvd. (11)
Weiser, Mrs. Frank A.....235 Charlevoix, G. P. (36)
Wendel, Mrs. J. S.....17310 Wildemere (21)
Weston, Mrs. Earl E.....5655 Forman Dr., Bloomfield Township
Weyher, Mrs. R. F.....5383 Oakman Blvd. (4)
White, Mrs. Donald L.....10410 Morross, Dearborn
White, Mrs. Milo R.....1187 Longfellow (2)
Whiteley, Mrs. Robert K.....216 Lakeland, G. P. (30)
Whitney, Mrs. Elmer L.....2 Kenberton Dr., Pleasant Ridge
Whittaker, Mrs. A. H.....17000 E. Jefferson, Grosse Pointe (30)
Wiant, Mrs. John L.....1205 Chesterfield, Birmingham
Wietersen, Mrs. Fred K.....260 Manor Rd., Rte. 2, Birmingham
Wight, Mrs. Frederick B.....1415 Parker (14)
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